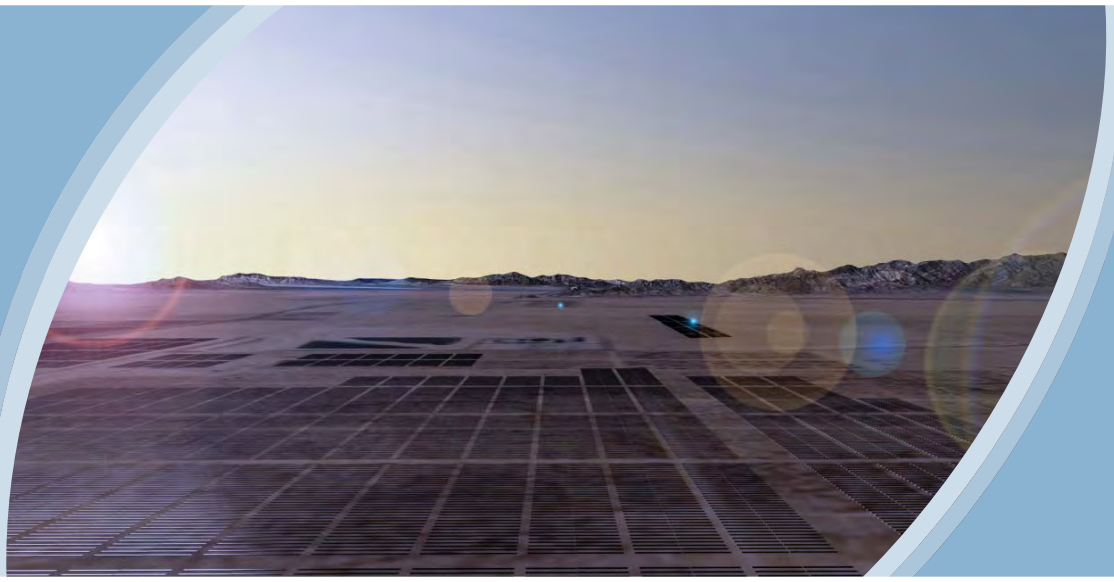
BLYTHE MESA SOLAR PROJECT



Draft Environmental Impact Report/Environmental Assessment

Volume IV: Technical Appendices

EIR No. 529
EA No. 0021
SCH No. 2011111056

June 2014

CEQA/NEPA Lead Agencies:

RIVERSIDE COUNTY
PLANNING DEPARTMENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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Draft
Environmental Impact Report/ Environmental Assessment

Blythe Mesa Solar Project

EIR No. 529
EA No. 0021
SCH No. 2011111056

Volume IV
Technical Appendices D – N

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June 2014

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ARCHAEOLOGICAL RESOURCES AND BUILT ENVIRONMENT SURVEY
FINAL REPORT

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April 2013

BLYTHE MESA SOLAR PROJECT

Archaeological Resource and Built Environment Survey

FINAL REPORT

Riverside County, California

Riverside County Planning Department Case Number CUP 03685

BLM Cultural Resource Use Permit No. CA-09-36

Fieldwork Authorization No. 66.66 11-18

PROJECT NUMBER: *122512*

PROJECT CONTACT: *Jim Rudolph, Ph.D.*

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LEGAL DESCRIPTION: T6S, R22E, Sections 27, 28, 29, 32, 33, AND 34; T7S,R22E, Sections 3, 4, 5, 6, 8, and 9; T7S, R21E, Sections 1, 7, 8, 9, 10, 11 12, and 14

ACREAGE: 3,660 acres

USGS QUADRANGLES: McCoy Wash, Ripley, and Roosevelt Mine

KEY WORDS: Inventory, Historic Sites, Archaeological Sites, Blythe Army Air Base, Riverside County, P-33-009186,P-33-012532, P-33-14083, P-33-018837, P-33-19996, P-33-019997, P-33-019999, P-33-020000, P-33-020001, P-33-020004, P-33-020005, P-33-020006, P-33-020007, P-33-020008, P-33-020009, P-33-020010, P-33-020011, P-33-020012, P-33-020013, P-33-020014, P-33-020015, P-33-020016, P-33-020017, P-33-020020, P-33-020021, P-33-020022, P-33-020023, P-33-020024, P-33-020025, P-33-020026

FIELDWORK PREFORMED: April-June 2011

POWER ENGINEERS

BLYTHE MESA SOLAR PROJECT
ARCHAEOLOGICAL RESOURCE AND BUILT ENVIRONMENT SURVEY
FINAL REPORT
RIVERSIDE COUNTY, CALIFORNIA

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Blythe Mesa Solar Project
Archaeological Resource and Built Environment Survey
Final Report, April 2013
Errata Sheet (responses to County comments), September 2013

County Comment 6/27/13	Errata
Cover Page	Replace cover page with attachment
Title Page:	Replace on Title Page: *PREPARED FOR:* *Applicants* *SOLAR STAR BLYTHE MESA 1, LLC* *and* *RENEWABLE RESOURCES GROUP* *5700 WILSHIRE BLVD., SUITE 330* *LOS ANGELES, CALIFORNIA 90036* *(323) 936-9303* *Lead Agencies* *BUREAU OF LAND MANAGEMENT* *RENEWABLE ENERGY COORDINATION OFFICE* *CALIFORNIA DESERT DISTRICT* *MORENO VALLEY, CALIFORNIA* *and* *COUNTY OF RIVERSIDE* *PLANNING DEPARTMENT* *4080 Lemon Street* *Riverside, CA 92502-1409* *(951) 955-6863* *PREPARED BY:* *POWER ENGINEERS, INC.* *731 EAST BALL ROAD, SUITE 100* *ANAHEIM, CALIFORNIA 92805* *(714) 507-2700* *GINI AUSTERMAN, JOHANNA MARTY* *and JIM RUDOLPH (PRINCIPAL INVESTIGATOR)*
Page i, fifth paragraph, last sentence	Change the sentence to: "In addition, two archaeological sites (P-33-019998 and P-33-020002) and two isolated finds (P-33-020018 and P-33-020019) were identified in an area that was later excluded from the APE."
Appendix E-	Add to the table: APN 863100005

Riverside County Requirements. Table "Parcels within the Solar Field"	
Page 11, Section 2.3.1, first paragraph	Replace discussion of Riverside County General Plan policies with the following: "Cultural Resources: The Multipurpose Open Space Element of the Riverside County General Plan (amended March 22, 2011) outlines policies intended to promote the preservation of cultural resources in the County of Riverside, as follows: **OS 19.2** -The County of Riverside shall establish a cultural resources program in consultation with Tribes and the professional cultural resources consulting community. Such a program shall, at a minimum, address each of the following: application processing requirements; information database (s); confidentiality of site locations; content and review of technical studies; professional consultant qualifications and requirements; site monitoring; examples of preservation and mitigation techniques and methods; and the descendant community consultation requirements of local, state, and federal law. (AI-A) **OS 19.3-** Review proposed development for the possibility of cultural resources and for compliance with the cultural resources program. **OS 19.4**- To the extent feasible designate as open space and allocate resources and/or tax credits to prioritize the protection of cultural resources preserved in place or left in an undisturbed state, (AI-B) **OS 19.5-** Exercise sensitivity and respect for human remains form both prehistoric and historic time periods and comply with all applicable laws concerning such remains."
Page 45, fifth paragraph	Add the following text: The four identified areas correspond to clusters of buildings shown on the BAAB map from the 1940s. Smaller features observed in the field (e.g., fire hydrants) were not shown on the map, nor where artifact clusters identified in the field. A radio tower is shown on the BAAB map, but no evidence of this structure was seen during the surface survey in 2011. The tower could have been removed in the past, or the map may show the tower in an incorrect location. A sewage pond is shown on the USGS map about 200 meters southeast of Cluster 3. A likely sewage pond is also shown at this location on an aerial photograph from 1943 (Wilson 2008). The general shape of the sewage pond can be seen on modern aerial photographs, but there is also visible evidence in these photographs of extensive earth moving in the vicinity. In 2011, POWER archaeologists did not identify any artifacts or features at this location. Because only a small portion of the sewage pond would have extended into the survey area, it is possible that evidence of the pond still exists outside the Project boundary.
Page 27, first paragraph, first sentence	Replace with the following: "POWER archaeologist, Gini Austerman, conducted a records search at the Eastern Information Center (EIC), housed at the University of California, Riverside (UCR), on April 7, 2011."

Page 27, second paragraph	Add the following text: "POWER conducted a BLM Class III archaeological and historic built environment survey of 3,660 acres of lands within the Project boundary that include the 125-foot ROW of the proposed 230 kV transmission line. These lands included private and BLM-managed public lands. The survey crew consisted of Dan Woodward, Trish Webb, Johanna Marty, April Shand, Reilly Murphy, Joshua Garr, Stacey Stanley, and Sam Smith. During the surveys, archaeologists walked parallel transects, using 15-meter (50-foot) intervals, to identify archaeological and architectural resources within or adjacent to the APE."
Page 27, last paragraph, Native American Communication	Add the following text: "In April 2011, POWER sent a letter to the NAHC requesting information regarding Native American groups with historic ties to, and interest in, the proposed Project area. The NAHC conducted a Sacred Lands search to determine if there are any sacred sites within the project area. On April 15, 2011 the NAHC recommended that additional information be requested from a list of Native American contacts the NAHC provided. In May 2011, 20 letters were sent to the tribes identified by the NAHC, which are listed in Table 4. The letter provided a brief description of the proposed Project and requested information concerning Native American cultural resources in the Project area, as well as any comments or concerns about the Project."
Page 37, Table 7	Add to the bottom of table: "*All resources are on private land."
Page 40, last paragraph	Replace with the following text: "P-33-012532 is a transmission line constructed between the 1940s and 1950s. It is still in use and has been subject to various upgrades. There is no indication that this resource is associated with events that have made a significant contribution to the broad patterns of history (Criterion A of the NRHP/Criterion 1 of the CRHR), or associated with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This architectural resource does not embody distinctive characteristics of a type, period, or method of construction; the work of a master; or possess high artistic value (NHRP Criterion C/CRHR Criterion 3). Nor does this resource meet NRHP Criterion 4/CRHR Criterion D for containing important scientific or historical data. Therefore, POWER agrees with previous researchers and recommends that P-33-012532, the Niland-Blythe 161 kV Transmission Line, is not eligible for listing in either the NRHP or the CRHR."
Pages 39, 40	Move the caption "FIGURE 6. P-33-009186. SITE OVERVIEW, NORTH OF RIVERSIDE AVENUE, FACING EAST" from page 40 to page 39.
Pages40, 41	Move the caption "FIGURE 7. P-33-012532. NILAND-BLYTHE 161 KV TRANSMISSION LINE" from page 41 to page 40.
Page 41, third paragraph	Replace with: "P-33-014083 is a transmission line constructed in the 1940s. This resource is still in use and has been modified by various upgrades. There is no indication that this resource is associated with events that have made a significant contribution to the broad patterns of history (Criterion A of the NRHP/Criterion 1 of the CRHR), or is associated with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This architectural resource does not embody distinctive characteristics of a type, period, or method of construction; the work of a master; or possess high artistic value (NHRP Criterion C/CRHR Criterion 3). Nor does this resource meet the criteria for NRHP Criterion 4/CRHR Criterion D for containing scientific or historical data. POWER recommends that the transmission line does not meet the criteria for the CRHR or the NRHP and therefore is not eligible for listing."

Page 47, third paragraph	Add the following paragraph: In addition to assessing integrity, POWER evaluated the eligibility of each of the areas by considering the buildings' association with General Patton and with the DTC/C-AMA. At the County archaeologist's recommendation, each of the clusters is considered a contributing element within the Blythe Army Air Base Historic District.
Page 46, second paragraph	Change the following text: "BAAB's association with the DTC lasted less than a year, and its association with General Patton was even briefer, only five months. The barracks, warehouses, fire station, utility building, and hospital within the Project APE were ~~for the most part~~ built and used after BAAB's ties to the DTC and General Patton ended. Nonetheless, BAAB's support for desert training missions continued until 1944. POWER agrees the Blythe Army Air Base Historic District (P-33-018837), including the portion with the APE, is associated with events that have made a significant impact on broad patterns of history (NRHP Criterion A/CRHR Criterion 1). While BAAB as a whole has ties to General Patton and therefore with the life of a significant person (NRHP Criterion B/CRHR Criterion 2), Patton's association with the portion of BAAB in the Project APE is very limited to non-existent.
Page 46, third paragraph	Insert the following text: "After several discussions and a site visit with the Riverside County Archaeologist on November 11, 2011, POWER recommends that despite the limited physical integrity of the features within the Project APE, the portion of BAAB falling within the current Project boundaries contain contributing elements and are, like the historic district, recommended eligible to the NRHP and CRHR."
Page 64, second paragraph	Insert the following text: "The utility shop is still standing, but its entire exterior has been modified. The exact dates of construction are unknown; however it was most likely built in late 1942. The Utility Shop and Yard are shown just north of the Hospital building on a historic aerial photo dating to 1943 (Wilson 2008). POWER's evaluation of this building finds that while integrity of location is maintained, integrity of design, materials, and workmanship has been lost. Integrity of setting has been diminished by the removal of most other physical features of the military base."
Page 65, first paragraph, last sentence	Insert the following text: "In addition, two archaeological sites (P-33-019998 and P-33-020002) and two isolated finds (P-33-020018 and P-33-020019) were identified in an area that was later excluded from the APE."
Page 39, first paragraph, second sentence.	Insert the following text: "A large quantity of historic debris included predominantly food cans and miscellaneous metal pieces (n = 200 to 1000). The surface material in the current Project area extends 3 meters north of the road and spans 30 meters east/west. A larger portion of the site extends into the power plant property on the south side of Riverside Avenue outside the Project APE, where thousands of cans are visible. Construction of the road and power plant has disturbed the site."
Page 48, last paragraph, second and third sentences.	Insert the following text: "Concentration 1 contains 15 cans and one bottle in a 5-by-5-meter area. Concentration 2 covers a 10-by-5-meter area 15 to 20 meters north of Concentration 1, and contains approximately 50 artifacts."
Page 56, first paragraph, first sentence.	Insert the following text: "P-33-020000 (Figure 23) is a sparse historic refuse scatter mixed with modern debris, containing approximately 30 artifacts.

MANAGEMENT SUMMARY

Solar Star Blythe Mesa 1, LLC (SSBM) and its development representative Renewable Resources Group (RRG) propose to develop the Blythe Mesa Solar Project (Project), a 485 megawatt (MW) solar photovoltaic electrical generation facility in Riverside County, California. The Project involves the construction and operation of the generation facility and associated infrastructure, which includes substations, maintenance facilities, access routes, and a 230 kilovolt (kV) transmission line that will interconnect the generation facility to the statewide electrical transmission grid through the Colorado River Substation. SSBM and RRG requested that POWER Engineers, Inc. (POWER) conduct an archaeological resource and historic built environment inventory of 3,660 acres for the proposed solar facility and transmission line right-of-way (ROW). This survey report describes the results of surveys on both public and private land. Two alternatives transmission line corridors are addressed in a separate report (POWER 2012).

The proposed solar facility would be entirely on private land; the proposed transmission line would cross public land managed by the Bureau of Land Management (BLM), Palm Springs-South Coast Field Office. Because of the proposed Project's location on both private and federal land, it must comply with both Section 106 of the National Historic Preservation Act (NHPA), with the BLM as lead federal agency, and the California Environmental Quality Act (CEQA), with the Riverside County Planning Department as the lead state agency.

The Project area, as currently planned, is in Township 6S, Range 22E, Sections 27, 28, 29, 31, 32, 33, and 34; Township 7S, Range 22E, Sections 3, 4, 5, 6, 8, and 9; and Township 7S, Range 21E, Sections 1, 7, 8, 9, 10, 11, 12 and 14.

Prior to the field investigations, a records search was conducted at the Eastern Information Center at the University of California-Riverside on April 4, 2011. The records search indicated 25 cultural resource studies had been performed previously within one mile of the Project boundaries and 82 cultural resources have been documented within the same radius. Three of the previously recorded cultural resources are within the Project area. Two are transmission lines (P-33-12532 and P-33-14083) and one is a World War II-era refuse deposit (P-33-9186). These resources had been previously evaluated and recommended to be not eligible for inclusion in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) (Eckhardt and Jordan 2008; Pignolio 2003; Pignolio, Baksh, and Dietler 1999).

POWER performed a BLM Class III survey of 100 percent of the lands in the area of potential effects (APE) as defined at that time, including the proposed solar facility and transmission line ROW; only 20 acres within the Project boundaries had been previously surveyed. A total of 31 cultural resources were identified in the APE, including a portion of the World War II Blythe Army Air Base (archaeological resources and one standing building), six other archaeological sites, two transmission lines, and 22 isolated finds. In addition, two archaeological sites and two isolated finds were identified in an area that was later excluded from the APE.

Only one of the resources, the Blythe Army Air Base Historic District (P-33-018837), meets the criteria for either the NRHP or the CRHR and is recommended eligible.

Resource P-33-018837 was recorded in 2010 immediately adjacent to the western boundary of the Project, and was recommended eligible for listing in the NRHP (Mitchell 2010 a, b). Although the boundaries of the district as recorded in 2010 did not extend into the Project area, features associated with BAAB were found by POWER within the Project boundaries. These features were added to the existing district record. POWER recommends that the boundary of the Blythe Army Air Base Historic District be extended to include the components within Project boundaries because they contain contributing elements. This resource also qualifies as a historical resource under CEQA.

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ACRONYMS AND ABBREVIATIONS

AC	alternating current
ACHP	Advisory Council on Historic Preservation
ADOE	Archaeological Determinations of Eligibility
AIRFA	American Indian Religious Freedom Act of 1978
AMSL	above mean sea level
APE	area of potential effects
APN	Assessor Parcel Numbers
ARPA	Archaeological Resources Protection Act of 1979
BAAB	Blythe Army Air Base
BLM	United States Department of the Interior, Bureau of Land Management
BP	before present
CAA	Civil Aeronautics Administration
C-AMA	California-Arizona Maneuver Area
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CHL	California Historic Landmarks
CHPO	County Historic Preservation Officer
CHRIS	California Historical Resources Information System
CPHI	California Points of Historic Interest
CRHR	California Register of Historical Resources
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CRUP	Cultural Resource Use Permit
DC	direct current
DPR	Department of Parks and Recreation
DTC/C-AMA	Desert Training Center/California-Arizona Maneuver Area
E.O.	Executive Order
EIC	Eastern Information Center
˚F	degrees Fahrenheit
FLPMA	Federal Land Policy and Management Act of 1976
GLO	General Land Office
GPS	Global Positioning System
kV	kilovolt
MLD	Most Likely Descendant
MW	megawatt
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
O&M	operation and maintenance
OHP	California State Office of Historic Preservation
POWER	POWER Engineers, Inc.
PRC	Public Resources Code
Project	Blythe Mesa Solar Project
PTNCL	Prehistoric Trails Network Cultural Landscape
PV	photovoltaic
ROW	right-of-way
RRG	Renewable Resources Group, LLC
SHPO	California State Historic Preservation Officer

SPRR	Southern Pacific Railroad
SSBM	Solar Star Blythe Mesa 1, LLC
THPO	Tribal Historic Preservation Officer
UCR	University of California, Riverside
USGS	U.S. Geological Survey
WAAC	Women's Army Auxiliary Corps
WPA	Works Progress Administration

1.0 INTRODUCTION

1.1 Purpose of the report

This cultural resource survey report has been prepared by POWER Engineers, Inc. (POWER) to summarize the results of a records search, literature review, archaeological resource and built environment surveys, and communications with Native American representatives regarding cultural resources that could potentially be adversely affected by construction, operation, and maintenance of the proposed Blythe Mesa Solar Project (Project). This Project, which has been proposed by Solar Star Blythe Mesa 1, LLC (SSBM) and Renewable Resources Group (RRG), would be in Riverside County, California. The analysis is based primarily on an intensive archaeological and built environment survey of the area of potential effects (APE) for the Project. The study was also performed to support a joint environmental impact report/environmental assessment (EIR/EA) prepared to comply with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

1.2 Project Overview

The proposed Project consists of construction and operation of a 485 megawatt (MW) solar photovoltaic (PV) electrical generating facility and associated infrastructure on approximately 3,660 acres, primarily on private land (Table 1). For this report, the APE is defined to include the solar facility and the 125-foot wide right-of-way (ROW) of the proposed transmission line. Subsequent to completion of the survey, the APE was modified by the BLM to include a wider 300-foot ROW for the proposed transmission line and 300-foot corridors for two alternative routes. The results of archaeological survey of the additional APE are addressed in a separate report (POWER 2012). The proposed Project would produce enough energy to power approximately 180,000 households, and would consist of the following components:

- Solar array field utilizing single axis solar PV trackers.
- System of interior collection power lines located between inverters and substations.
- Three on-site substations (approximately 300 feet long by 300 feet wide).
- Two operation and maintenance (O&M) buildings (approximately 3,500 square feet each).
- Two primary off-site access roads and several interior access roads.
- Approximately 8.4 miles of 230 kilovolt (kV) transmission line, depending on the selected route alternative (archaeological survey of two alternative routes is discussed in a separate report [POWER 2012]).

Table 1. Project Acreage and Jurisdiction

	Private Land	BLM-Managed Lands	TOTAL
Solar Facility Site	3,587 acres	n/a	3587 acres
230 kV Transmission Line*	1.0 mile (15 acres)	3.8 miles (58 acres)	4.8 miles (73 acres)
TOTAL ACREAGE	3602 acres	58 acres	3660 acres

*Proposed transmission line only

The Project is in the Palo Verde Mesa region of Riverside County (Figure 1). The fenced-in solar facility would occupy 3,587 acres of private land. Within this area, a 230 kV transmission line would connect all three proposed substations, extending a distance of approximately 3.6 miles on site. From the southernmost substation to the Colorado River Substation, the transmission line would extend another 4.8 miles within a 125-foot wide right-of-way (ROW) (or 73 acres) traversing 3.8 miles of United States Department of the Interior, Bureau of Land Management (BLM)-managed lands (58 acres) and 1.0 mile of private land (15 acres). The proposed route was surveyed as part of the study, but two alternative routes had not been defined at the time of the survey, and therefore, were not included in this field survey. These two routes plus a wider 300-foot survey corridor for the proposed route are addressed in a separate survey report (POWER 2012).

The Project area to be occupied by the solar array field is primarily characterized by vacant and agricultural land uses. Existing vacant land consists of either fallow farmland or creosote bush scrub. The Project site includes both active and previously farmed lands. Active agricultural uses include a citrus grove and wheat and alfalfa fields. Jojoba was previously grown for commercial purposes. The area for the proposed transmission line, west of the solar array field, is primarily actively cultivated agricultural land, abandoned agricultural land, or disturbed creosote scrub.

Development in the surrounding area includes the community of Nicholls Warm Springs/Mesa Verde, Blythe Airport, the 520-MW natural gas-fired Blythe Generating Plant, electrical substations, electrical transmission lines, other solar projects, ancillary agricultural facilities, and dirt roads.

The location is depicted on the Roosevelt Mine, Ripley, and McCoy Wash 7.5-minute United States Geological Survey (USGS) Topographic Quadrangles. The Project is in:

- Sections 1, 7, 8, 9, 10, 11, 12, and 14 of Township 7 South, Range 21 East
- Sections 3, 4, 5, 6, 8, and 9 of Township 7S, South, Range 22 East
- Sections 27, 28, 29, 32, 33, and 34 of Township 6 South, Range 22 East, of the San Bernardino Base Meridian

Interstate Highway 10 bisects the Project area, which is bounded on the north and south by undeveloped open desert, on the east by agricultural lands and on the west by the Blythe Airport and open desert lands. The Assessor Parcel Numbers (APN) for the solar facility, included for Riverside County Planning Department purposes, are listed in Table 2, and Table 3 lists the APNs for the proposed transmission line 125-foot ROW.

Table 2. Assessor Parcels within the Solar Facility

RIVERSIDE COUNTY				CITY OF BLYTHE
821110004	824102015	863040015	863100010	824101014
821120025	824102016	863040017	863100011	824101015
821120026	824130006	863040020	863100012	824101016
821120027	824130007	863040021	863100016	824101017
821120028	863030002	863050004	879090036	824102020
821120029	863030003	863050007	879090037	824102023
821120038	863030004	863050008	879090038	824102024
821120039	863030005	863050009	879090039	824102026
821120040	863030006	863060015	879090040	824102027
821120042	863030007	863060016	879090041	824110035
821120043	863030008	863060017	879090042	824110036
821120044	863030009	863060018	879090043	824110037
821120048	863030010	863070018	879090044	824110038
824080003	863030013	863070019	879090045	824122013
824080005	863030014	863070022	879090048	
824090009	863030015	863100005	879090049	
824090024	863030016	863100006	879090050	
824102013	863030017	863100008	879090051	
824102014	863040001	863100009	879110013	
			879110014	

Table 3. Assessor Parcels within the Proposed Transmission Line 125-Foot ROW

RIVERSIDE COUNTY	BLM
879080013	879080020
879080014	879080021
879080028	879080022
879080032	879080024
879090048	879080026
	879080027
	879090033
	879090034
	879090035

The Project would utilize single-axis PV trackers with 1,425,600 silicon solar panels. All panels would be oriented in the same direction as they track the sun's movement. By design, the PV panels absorb sunlight to maximize electrical output and use anti-reflective glass, resulting in about half the reflectance of standard residential and commercial glass.

The panels would be configured into trackers, and the trackers configured into blocks. Each block is comprised of six trackers with 18 north-south oriented rows of PV panels (295 feet long and 140 feet wide) that rotate up to 45 degrees from east to west to follow the daily motion of the sun (total number of rows is 35,640), with the center of rotation being 4 to 8 feet above grade. Torque tubes act as the horizontal support for the PV panels. The panels would be supported by micro-piles that would be driven directly into the ground to a depth of 8 to 12 feet using a vibration technology to reduce noise impacts. Torque tubes, electrical wire trays, and panels would then be installed on the piles. Concrete foundations for the drive motors (device used to move drive strut back and forth) would be poured in place, and electrical equipment for the array would be set in place. A tracked backhoe would drive piles. No blasting or rock breaking is anticipated or proposed. Small truck-mounted cranes or grade-all forklifts would place trackers on support piles.

Individual PV panels would be connected together in series to create a 'string' to carry direct current (DC) electricity. Multiple DC strings would be brought together into an above-ground combiner box to merge the strings into a single high-current cable. From the combiner boxes, the cabling would run in raceways and underground to inverters (5 feet wide and 10.5 feet tall) mounted on small concrete pads (minimum 0.5 feet above grade) distributed across the site. The inverters would take the DC output from the combiner boxes and convert it to alternating current (AC) electricity. Within the solar facility, 12-foot-wide dirt access roads would be constructed every 200 to 400 feet to allow access and maintenance of the solar panels.

Next, the AC electricity would be increased to medium voltage with a standard 'step-up' transformer. The medium voltage collection lines would begin at the inverter/transformer pads and would be placed in 3-foot deep trenches until the output from 10 to 15 blocks is gathered and transferred at risers to a system of overhead medium voltage collection lines for transmission to the substation. The medium voltage collection circuits would be mounted above ground on poles (35 to 60 feet tall), and carry 20 to 30 MW of electricity. To the extent possible, the poles would be located along the northern edge of the blocks.

The three Project substations (each 300 feet long by 300 feet wide) would collect all the medium voltage circuits (34.5 kV) and would step-up the voltage to 230 kV.

The Project substations and the interconnection point would be linked by a 230 kV double-circuit transmission line. The transmission line facilities include a single set of tubular steel poles 85 to 125 feet tall with an average distance between poles of 500 to 800 feet. The poles would be directly embedded in

the soil or set in concrete foundations 20 to 30 feet deep. Access roads to each structure will be 16 to 20 feet wide by 8 inches deep of gravel over compacted subgrade and located in the proposed ROW.

Two O&M buildings (approximately 3,500 square feet each, enclosed, and no more than 30 feet tall) would provide work and storage space. A covered outdoor temporary assembly and storage area (80,000 square feet, 25 feet tall) would be directly adjacent to the O&M buildings.

The site would be enclosed with fencing typically set 30 feet from the array. The purpose of the fencing is to restrict public access to the site.

Figure 1 - Blythe Mesa Solar Project

Legend

- Proposed Solar Facility
- Colorado River Substation
- Proposed 230 kV Transmission Line

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S

POWER ENGINEERS

1: 48,000

0 0.25 0.5 1 1.5 2

Miles

H:\122512\DD\Apps\Cultural_Report\Figure_1_Project_Area_Map_Fed.mxd

Blythe Mesa Solar Project

Blythe Airport

Hobson Way

Mesa Drive

Mesa Verde
(Nicholl's Warm Springs)

Blythe Mesa 230 kV
Transmission Line

Colorado River
Substation Site

California

Riverside County

Project
Location

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2.0 REGULATORY FRAMEWORK

The principal laws relevant to the protection of cultural resources in the proposed Project area are the California Environmental Quality Act (CEQA), with particular reference to California Public Resources Code (PRC) 21083.2 to 21084.1, and the National Historic Preservation Act of 1966, as amended (NHPA). This document also supports an environmental analysis prepared to comply with the National Environmental Policy Act of 1969 (NEPA).

2.1 Federal

2.1.1 National Environmental Policy Act

NEPA (42 U.S.C. 4321-4346) establishes national policy for the protection and enhancement of the environment. Part of the function of the federal government in protecting the environment is to "preserve important historic, cultural, and natural aspects of our national heritage." The act is implemented by the Council on Environmental Quality (CEQ) regulations at 40 CFR 1500-1508.

For this Project, the BLM is the lead federal agency for NEPA compliance.

Although the only component of the Project on Federal land would be the proposed transmission line, the BLM considers the entire Project to be a connected action as defined by NEPA (40 CFR 1508.25 (a)(1)). Actions are connected if they automatically trigger other actions that may require an EIS; cannot or will not proceed unless other actions are taken previously or simultaneously; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(i, ii, iii)).

2.1.2 National Historic Preservation Act

The NHPA (16 U.S.C. 470f) is the principal federal law in the United States protecting cultural resources. Section 106 of the NHPA directs all federal agencies to take into account the effects of their undertakings (i.e., actions, financial support, and authorizations) on properties included in or eligible for the National Register of Historic Places (NRHP).

The Advisory Council on Historic Preservation (ACHP) regulations at 36 Code of Federal Regulations (CFR) Part 800 implement Section 106 of the NHPA. These regulations establish the NRHP as a planning tool to help federal agencies evaluate cultural resources in consultation with the State Historic Preservation Officer (SHPO) and the ACHP. The criteria for determining whether cultural resources are eligible for listing in the NRHP are provided in 36 CFR 60.4. These criteria are:

A. associated with events that have made a significant contribution to the broad patterns of history;
B. associated with the lives of persons significant in the past;
C. embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction; or
D. have yielded, or may be likely to yield, information important in prehistory or history.

A cultural resource eligible for the NRHP is called a historic property regardless of the time period to which it dates. To be listed in, or determined eligible for listing in, the NRHP a cultural resource must meet one or more of the above criteria and possess integrity. Integrity is defined as the authenticity of a resource's historic identity as evidenced by the survival of physical characteristics that existed during the prehistoric or historic period of use. The NRHP recognizes seven aspects, which in various combinations define integrity: location, design, setting, materials, workmanship, feeling, and association. Integrity of location means the resource has not been moved from its historic location. Integrity of design, materials,

and workmanship mean the resource's original building materials, plan, shape, and design elements remain intact. Integrity of setting means the surrounding landscape has changed very little since the period of importance for the resource. Integrity of feeling and association means the resource retains a link to an earlier time and place and is able to evoke that era.

Historic properties must generally be at least 50 years old; however, certain cultural resources associated with more recent, exceptionally important events (e.g., the development of nuclear energy; space exploration) may also be considered eligible to the NRHP.

Compliance with Section 106 is required whenever a project has a federal nexus, meaning the project is on federal land, uses federal funds, or is permitted by a federal agency. The BLM proposes to issue a new ROW grant for the proposed transmission line. This activity constitutes an undertaking as defined in 36 CFR 800.16 (y).

As discussed in Section 2.1.1, the BLM considers the development of the proposed solar facility to be a connected action, even though the solar facility would not itself be on federal land. The BLM's 8100 manual series on cultural resources explains BLM's Section 106 responsibility on non-federal lands. Factors taken into consideration include the degree of federal involvement; the nature and extent of potential effects on historic properties; the likely nature and the location of historic properties in the APE; and the views of the SHPO, Tribes, and interested public. However, the primary factor is the extent to which BLM's authorization (in this case of the proposed transmission line) could result in effects to historic properties, including properties within the proposed solar facility.

2.1.3 Antiquities Act

The Antiquities Act of 1906 (16 U.S.C. 431-433) was the first law to protect and preserve cultural resources on federal lands. It makes it illegal to remove cultural resources from federal lands without a permit and establishes penalties for illegal excavation and looting. The Archaeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. 470) reinforces and replaces portions of the Antiquities Act as the authority for special use permits regarding archaeological investigations.

2.1.4 Federal Land Policy and Management Act

The Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701) requires the BLM to manage their lands on the basis of multiple use in a manner that will "protect the quality of…historical …resources and archaeological values." FLPMA is a comprehensive law that provides for the periodic inventory of public lands and resources, for long-range, comprehensive land use planning, for permits to regulate the use of public lands, and for the enforcement of public land laws and regulations. FLPMA compels agencies to manage all cultural resources on public lands through the land management planning process.

2.1.5 Archaeological Resources Protection Act

The ARPA (16 U.S.C. 470 aa-mm)establishes civil and criminal penalties for the unauthorized excavation, removal, damage, alteration, or defacement of archaeological resources; prohibits trafficking in resources from public lands; and directs federal agencies to establish educational programs on the importance of archaeology. The act also establishes permit requirements for removal or excavation of archaeological resources from federal lands. The law applies to archaeological resources more than 100 years old found on public lands. No distinction is made regarding NRHP eligibility.

2.1.6 American Indian Religious Freedom Act

The American Indian Religious Freedom Act of 1978 (AIRFA) requires federal agencies to consult Native American groups when a proposed land use might conflict with traditional Indian religious beliefs

or practices; to avoid interference with these beliefs to the extent possible; and to maintain access to religious or sacred areas whenever feasible.

2.1.7 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. 3001) provides a process for federal agencies to return certain Native American cultural items – human remains, funerary objects, sacred objects, or objects of cultural patrimony – to lineal descendants and culturally affiliated Indian tribes. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional excavation and unanticipated discovery of Native American cultural items on federal lands, and penalties for noncompliance and illegal trafficking. Permits for the excavation or removal of cultural items protected by the act require Tribal consultation, as do discoveries of cultural items made during activities on federal lands. The Secretary of the Interior's implementing regulations are at 43 CFR Part 10.

2.1.8 Executive Order 11593, Protection and Enhancement of the Cultural Environment

Issued in 1971, Executive Order (E.O.) 11593 directs land-holding federal agencies to identify and nominate historic properties to the NRHP and requires that these agencies avoid damaging historic properties that might be eligible to the NRHP. It also directs agencies to treat resources eligible to the NRHP as if they were already listed.

2.1.9 Executive Order 13007, Indian Sacred Sites

E.O. 13007, issued in 1996, directs federal agencies responsible for managing federal lands to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners; avoid adversely affecting the physical integrity of such sacred sites; and maintain the confidentiality of sacred sites.

2.1.10 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments

E.O. 13175 issued in 2000, directs federal agencies to establish regular and meaningful consultation and collaboration with Tribal officials in the development of federal policies that have Tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

2.1.11 Executive Order 13287, Preserve America

This executive order, issued in 2003, encourages the federal government to take a leadership role in the protection, enhancement, and contemporary use of historic properties and establishes new accountability for agencies with regard to inventories and stewardship.

2.1.12 Memorandum for the Heads of Executive Departments and Agencies Regarding Government-to-Government Relations with Native American Tribal Governments

The Presidential memorandum, issued in 2009, directs each federal agency to operate within a government-to-government relationship with federally recognized tribal governments; consult with tribal governments; assess the impact of plans, projects, programs, and activities on tribal trust resources; and assure tribal rights are taken into account during consideration of such plans, projects and activities.

2.2 State

2.2.1 California Environmental Quality Act (CEQA)

Under CEQA, a project is considered to have a significant effect on the environment if it causes a substantial adverse change in the significance of a historical resource or unique archaeological resource. Substantial adverse change means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired or diminished. Furthermore, it is recommended by CEQA that cultural resources be preserved *in situ* whenever possible through avoidance of the resource. Whenever a historical resource or unique archaeological resource (Public Resources Code [PRC] 21083.2) cannot be avoided by project activities, effects shall be addressed and mitigated as outlined in PRC 15126.4 and 15331 of CEQA.

For this Project, Riverside County is the lead state agency for CEQA compliance.

Historical Resources

According to CEQA, lead agencies are required to identify historical resources that may be affected by any undertaking involving state or county lands, funds, or permitting. Also, the significance of such resources that may be affected by the undertaking must be evaluated using the criteria for listing in the California Register of Historical Resources (CRHR) (PRC 5024.1, Title 14 CCR, Section 4852). Generally, a resource is considered by the lead agency to be historically significant if the resource has integrity and meets the criteria for listing in the CRHR. Resources already listed in or determined eligible for the NRHP and California Historic Landmarks (CHL) No. 770 and above are by definition eligible for the CRHR. Historical resources included in resource inventories prepared according to California State Office of Historic Preservation (OHP) guidelines or designated under county or city historic landmark ordinances may be eligible.

For a resource to be eligible for the CRHR, it must satisfy each of the following three standards:

I. A property must be significant at the local, state or national level, under one or more of the following criteria:

    1) It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.
    2) It is associated with the lives of persons important to the nation or California's past.
    3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
    4) It has yielded, or may be likely to yield, information important to the prehistory or history of the state or the nation.

II. A resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reasons for its significance.
III. It must be fifty years old or older (except for rare cases)

Integrity is defined as the authenticity of a historical resource's physical identity, evidenced by the survival of characteristics that existed during the resource's period of significance. CRHR regulations specify that integrity is a quality that applies to historical resources in seven ways: location, design, setting, materials, workmanship, feeling, and association.

Unique Archaeological Resources

Under CEQA, the lead agency must also determine whether a proposed project will have a significant effect on unique archaeological resources. PRC 21082.2(g) states:

"…a 'unique archaeological resource' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person."

A non-unique archaeological resource does not meet these criteria and does not need to be given further consideration other than simple recording, unless it happens to qualify as a historical resource.

Native American Human Remains

CEQA (PRC 15064.5) provides that when an initial study identifies the existence of, or probable likelihood, of Native American human remains within the project, a lead agency will work with the appropriate Native Americans as identified by the Native American Heritage Commission (NAHC).

2.3 Local

2.3.1 Riverside County General Plan

Chapter 5 of the Riverside County General Plan outlines policies intended to promote the preservation of cultural resources in the County of Riverside. Open Space Policies 19.2-19.4 within this chapter identify the need for a review of project's archaeological sensitivity, resource confidentiality, Native American consultation, and a report of findings. Open Space Policies 19.5-19.7 identify the need for review of large development project proposals by the History Division of the Riverside County Regional Park and Open-Space District with respect to the potential destruction or preservation of historical sites. The chapter also calls for promotion of built environment preservation through application of the Historic Building Code and authorization of tax credits for historic building and structure retrofitting.

County requirements for the management of cultural resources impacted by the Project are listed in Appendix E.

3.0 ENVIRONMENTAL SETTING

The Project area is in the Palo Verde Valley, which is along the western edge of the Colorado River. This area is on Palo Verde Mesa, a series of ancient raised river terraces, and is part of the Sonoran Desert. The topography is relatively flat and slopes toward the southeast; elevations range from 260 to 400 feet above mean sea level (AMSL). The Project area is near the Big Maria Mountains on the northwest, the McCoy Mountains on the west, the Mule Mountains on the southwest, and the Colorado River on the east. These mountain ranges, trending northwest to southeast, create a natural barrier between the Colorado River and the greater Colorado Desert. Development in the Project vicinity includes agricultural fields and groves as well as the Blythe Airport. The Project area also includes undeveloped open desert.

The subtropical climate of the Colorado Desert, a sub-region of the Sonoran Desert, is currently characterized by dry, mild winters averaging 45 degrees Fahrenheit (˚F) and dry, hot summers that average 104˚F. Summer highs are known to reach 120˚F. Precipitation ranges between two and ten inches per year, with most of the precipitation occurring between November and March. Although rainfall is primarily in the winter months, the region is periodically influenced by tropical weather conditions including sudden monsoonal summer storms.

In the Riverside County region, conditions during the Late Pleistocene (22,000 to 11,000 years before present [BP]) were cooler and wetter than today, and supported pinyon-juniper woodlands, lakes, savannah grasslands and creosote scrub at the lower elevations. The course of the Colorado River changed over time, creating terraces and depositing sediments between its headwaters in the Colorado Rocky Mountains and its terminus in the Gulf of California. During the Early Holocene (11,000 to 8,000 BP) the river flowed into previously dry areas inland and with periodic flooding episodes, the extent of inland lakes, such as the Salton Trough and the ancient Lake Cahuilla, increased dramatically. During the Middle to Late Holocene (8,000 BP to present) the warm and dry conditions continued and were dominated by summer monsoons in the desert and winter storms along the coast. Lakes became ephemeral (Van Devender and Spaulding 1983).

Research of the Mojave Desert paleohydrology is provided by packrat midden studies. The reduction in the presence of blackbrush (*Coleogyne ramosissima*) desert scrub in middens clearly indicated a warmer and drier environment. However, to the south in the Salton Sink the timing of the filling and emptying of ancient Lake Cahuilla contradicts the chronology of droughts experienced in the Mojave Desert. Geomorphic evidence demonstrates that the high lake stands were the result of the shifting of the Lower Colorado River channel. Lake Cahuilla was frequently filled between 500 and 1,500 BP, although not necessarily due to climatic factors (Waters 1983).

Surface water sources are minimal on Palo Verde Mesa, limited to seasonal and perennial sources. Perennial water comes from McCoy Springs in the McCoy Mountains west of the Project area. Springs, including McCoy Springs, are at the bases of the nearby mountains. Monsoon activity turns dry washes into raging torrents that cut through Palo Verde Mesa. The Colorado River is eight miles to the east of the Project area.

Sediments in the Project area originated from quaternary deposits from the Colorado, which ran through the Project area, and from alluvial fan deposits from the mountains to the northwest. Alluvium, colluvium, and slope-wash deposits of the Late Pleistocene and Holocene are found in drainage features, including valleys and streams. The alluvial deposits grade indiscernibly with colluvium and slope-wash deposits flanking the lower slopes next to the valleys. Large remnant river terraces remain in the Project area. Heavily patinated desert pavement (a layer of course pebbles and gravel created after wind removal of the finer materials) is common in this climate and is often present in broad, well-developed patches in the Project area (Norris and Webb 1990). Nearby terrace-top cobble deposits were a source of stone

material collected by Native Americans. This lithic material includes quartzite, chert and chalcedony, all of which were used by the prehistoric inhabitants for stone tools.

Today, the vegetation communities in the Project area are similar to those of the Mojave Desert to the northwest. These vegetation and habitat communities are sparse but are able to support Creosote Bush Scrub and also include Desert Dunes, Desert Dry Wash Woodland, and Agricultural Land. The natural vegetation community is primarily creosote bush scrub, which includes creosote bush (*Larrea tridentate)* and white bursage or burrobush (*Ambrosia dumosa).* Closer to the Colorado River, palo verde (*Parkinsonia florida)* is found in drainages as well as mesquite (*Prosopis* spp.) and ironwood (*Olneya tesota)* bushes. These are among the important food plants used by the local tribes (Bean and Saubel 1972). Currently, the land within the Project boundaries is used for agriculture or is open, undeveloped desert.

Fauna in the Project area include desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), mule deer (*Odocoileus hemionus*) and Desert bighorn sheep (*Ovis canadensis nelsoni*). The desert cottontail is most abundant in the dunes area whereas the black-tailed jackrabbit is more prevalent on the desert floor, floodplains, and rocky slopes (Ryan 1968; Jaeger 1965). Reptiles include lizards and snakes, particularly the western diamondback (*Crotalus atrox*), and the desert tortoise (*Gopherus agassizi*). Avian species common to the Project area include the common raven (*Corvus corax*) and the greater roadrunner (*Geococcyx californianus*).

4.0 CULTURAL SETTING

4.1 Prehistoric Context

Archaeological research in the Colorado Desert began in the 1930s with Malcolm Rogers. He established artifact typologies and a chronology based on tools and settlement patterns. His research is used as the foundation of current research in the area. The majority of archaeologists working in the region use the following cultural sequence, which is a brief synthesis of the prehistory of the region as we understand it, Paleoindian Period (about 12,000-7,000 BP), Archaic Period (7,000 – 1,500 BP) Late Prehistoric Period (1,500 to 150 BP).

4.1.1 Paleoindian Period (San Dieguito) (12,000-7,000 BP)

The Paleoindian period experienced profound environmental changes, as the cool, moist conditions of the Pleistocene gave way to the warmer, drier climate of the Holocene (Spaulding 1990). Settlement patterns of this period suggest habitation occurred along prehistoric lakeshores and on mesas near springs and washes (Schaefer and Laylander 2007). The Palo Verde Mesa area was not conducive to settlement due to the limited water resources available and was likely used as a travel corridor between the mountains and rivers (von Werlhof 2004). In the larger Riverside County region, Paleoindian sites may be found on stable landforms and in protected caves above floodplains and valley/riparian environments and along ridge systems and in mountain passes that may have served as travel routes (Moratto 1998).

The Paleoindian inhabitants were nomadic large-game hunters whose tool assemblage included choppers; percussion-flaked scrapers and knives; large, well-made fluted, leaf-shaped, or stemmed projectile points (e.g., Lake Mojave, Silver Lake); crescents; heavy core/cobble tools; hammerstones; bifacial cores; and scraper planes (Rogers 1939, 1966; Warren 1968). The subsistence strategy used during the San Dieguito period focused primarily on hunting large and small game as well as gathering available plants available throughout the seasons. Near the end of this period, the climate began to warm, which caused the lakes and marshes to dry, resulting in the need for different subsistence and settlement strategies (Moratto 1984).

4.1.2 Archaic Period (Pinto and Amargosa) (7,000–1,500 BP)

The climatic patterns of the Late Paleoindian period continued into the Early Archaic period. In the Colorado Desert region, Rogers (1939) assigned the Amargosa complex to this period, which dates to approximately 8,000 – 1,500 BP (Vaughn and Warren 1980). Tool types identified with this period include Pinto and Amargosa projectile points and knives, scrapers and choppers. The use of ground stone tools increased during this period (McGuire and Schiffer 1982; Warren 1984).

In the inland regions of Southern California, this period of cultural development is marked by tools used for grinding seed for flour. Artifacts dating to this period include large leaf-shaped projectile points and knives; manos and milling stones used for hard-seed grinding; and many other artifacts, such as beads, pendants, charmstones, discoidals, spherical stones, and cogged stones (Kowta 1969; Warren, et al. 1961).

The beginning of the Late Archaic coincides with a period of increased moisture in the region. Research suggests the California desert environment was unstable during these time periods, forcing the hunter-gatherers towards more hospitable regions (Crabtree 1981; Schaefer 1994; Weide 1974). However, Late Archaic sites have been recorded in more southern portions of Riverside County's low desert near the Peninsular Ranges where water was more available.

Late Archaic site types include residential bases with large, diverse artifact assemblages, abundant faunal remains, and cultural features, as well as temporary bases, temporary camps, and task-specific activity areas. Diagnostic projectile points of this period include more refined notched (Elko), concave base

(Humboldt), and small stemmed (Gypsum) forms (Warren 1984). The mortar and pestle were used to process acorns, an important storable resource. *Haliotis* and *Olivella* shell beads, and ornaments and split-twig animal figurines indicate the interior California occupants were in contact with populations on the California coast and in the southern Great Basin.

4.1.3 Late Prehistoric (Patayan Complex) (1,500–150 BP)

A period of even more persistent drought began by 1,500 years ago, and conditions became significantly warmer and drier (Jones et al. 1999; Kennett and Kennett 2000). The dry period continued until 750 years ago (Spaulding 2001).

The Patayan complex is marked by strong regional cultural developments to the economic system and settlement patterns, especially in the Southern California desert regions, which were heavily influenced by the Hakataya (Patayan) culture of the lower Colorado River area (Warren 1984). This period includes a pre-ceramic transitional phase ranging between 1,500 and 1,200 years BP. The Patayan complex is distinguished from the transitional phase by the introduction of pottery using the paddle-and-anvil technique as well as the use of bow-and-arrow technology. Also noted is the use of floodplain agriculture (Rogers 1945). The annual flooding of the Colorado River provided water to sustain the crops and also revitalize the soil. Nearby Lake Cahuilla appears to have flooded between 950 and 300 years BP (Laylander 1997; Schaefer 1994). These technological advancements are believed to be from Mexico or the ancestral Pueblo cultures of the Southwest deserts (McGuire and Schiffer 1982; Rogers 1945; Schroeder 1979).

Diagnostic artifacts include Saratoga Springs projectile points, small triangular projectile points, mortars and pestles, steatite ornaments and containers, perforated stones, circular shell fishhooks, numerous and varied bone tools, and bone and shell ornaments. Elaborate mortuary customs and extensive trade networks are also characteristic of this period. Additionally, abundant amounts of obsidian were being imported into the region from the Obsidian Butte source exposed by the desiccation of Lake Cahuilla.

Two ceramic types have been identified as the most prevalent for the Palo Verde Valley area, Lower Colorado Buffware and Tizon Brownware. Harner (1957) observed in the Chuckwalla Valley the frequency of Lower Colorado Buff was double that of the Tizon Brown. When this pottery was compared and cross-dated with a collection from the Bouse Site in Arizona, Harner found the pottery from the Chuckwalla Valley could date between A.D. 1300 and 1900.

Lower Colorado Buffware is made from riverine and lacustrine clay, usually with fine grains of sub-angular to sub-round quartz, feldspars, and other opaque spars. Most vessels are highly oxidized due to the firing process. The surface finish is typically smoothed with faint wipe marks left by mops. The larger vessels may display anvil marks on the interior surfaces. A thick cream-colored scum coat is common in the desert regions, and stucco treatment is also common along the Colorado River and in the desert. The surface color is usually tan with pink tones. Recurved rims are common, polish is rare, and decorations often include fingernail impressions, in casing and punched holes. Colorado Buff dates to Patayan III (A.D. 1500 to post-1900).

Tizon Brownware is made from clays from decomposing granite outcrops in the California-Colorado desert regions, and usually contains higher iron content. The vessels are typically reddish brown and contain little to no temper. Both Tizon Brown and Lower Colorado Buff were usually made using coils, smoothed and shaped by a paddle and anvil.

In an ongoing study, Laylander and Schaefer (2010) have applied a regional perspective to evaluate and treat cultural resources within a broad landscape approach (2010). The current Project falls within their

Prehistoric Trails Network Cultural Landscape (PTNCL) area, which includes Palo Verde Valley, McCoy Wash and Palen Valley.

By the Late Prehistoric period there appears to have been a transition to more mobile patterns of travel and trade between the Colorado River and Lake Cahuilla (Pendleton 1984). Long range travel for resource procurement and trade resulted in a system of trails through the Colorado Desert. The increased mobility along the trail system also allowed the opportunity for interaction between neighboring tribes. As the Spanish began to explore the area, native trails and trade routes were used and expanded.

Three prehistoric trails, described below, were in the Project vicinity; these were likely used to travel to and from springs and other water sources. McCarthy (1993) explained trails in the McCoy Springs region were unbordered and did not indicate evidence of deliberate construction.

Early research in the area noted recognizable trail types, including major long-distance, minor long-distance, and subsidiary trails between settlements and resources areas (Rogers 1941). McCarthy (1993) defines two types of trails, primary and secondary. Primary trails are based around a destination fixed on the landscape, such as a spring. McCoy Springs was the destination spot for all of the trail segments in the current Project vicinity. Secondary trails branch off from the primary trails. McCarthy identified CA-RIV-53, east and northwest of the Project, as the predominant trail leading to McCoy Springs. The trails along the southern flank of the McCoy Mountains probably emanate from the Colorado River (Palo Verde Valley) and lead toward Chuckwalla Valley. Between the McCoy and the Chuckwalla Mountains, several springs (McCoy, Chuckwalla, and Corn Springs), tanks (Palen and Mule Tanks), and dry lake beds (Ford Dry Lake and Palen Lake) were linked with a network of trails. The trails found on the desert pavement were in excellent condition. These trails include CA-RIV-53 (known as the Halchidhoma Trail), CA-RIV-885, less than a mile southwest of the Project, and CA-RIV-3673 less than a mile northeast of the Project.

Other trails lead toward canyons containing temporary water sources. Petroglyph sites have been documented in these canyons; two short trail segments that lead to a large canyon southeast of McCoy Peak have been documented in the Project vicinity. In addition to water sources, other resource areas would include lithic quarries and assay areas. A line of pebble terraces line the southern flank of the McCoy Mountains. Several extremely large prehistoric lithic sources and assay sites have been recorded in these terraces. Trail segments between these sites have been documented. One segment, CA-RIV-3671, is within one mile of the Project (von Werlhof 1987). McCarthy speculates shorter trail segments in the area of McCoy Wash were used to connect specialized activity areas within larger habitation areas (McCarthy 1993).

Trails were also used for trade routes. Trade between southern California and the Southwest may have begun more than 9,000 years ago (Ruby 1970), but the predominant trading activity ranged between A.D. 900 and A.D. 1300. Exchange items included California marine shell and Southwestern pottery. Johnston and Johnston (1957) found segments of trails from the Colorado River through the San Gorgonio Pass and into Riverside County. The system connected the Palo Verde Valley to the McCoy Mountains through the Chuckwalla Valley into the Chuckwalla Mountains.

Trails are also a significant element in the sacred landscape; they link the spiritual world to the natural landscape. Trails have been marked with rock shrines and artifacts such as pottery drops and flaked stone scatters, particularly white quartz. Songs and stories contain named places such as mountains, water sources, valleys and other geographical locations along known trails (Fowler 2009).

4.2 Ethnography

The Colorado Desert area of Riverside County is within the ethnographic boundaries of several different 18th and 19th century Native American groups. Ethnographers documented these tribes and prepared syntheses for the Quechan (Bee 1981, 1982, 1983, 1989; Forbes 1965; Forde 1931), Halchidhoma (Harwell and Kelly 1983; Spier 1933), the Mojave (Kroeber 1925; Stewart 1983), and the Chemehuevi (Kelly and Fowler 1986; Laird 1976, 1984), as well as the Cahuilla (Bean 1972; Bean and King 1974; Bean and Vane 1978) (see Figure 2).

4.2.1 Colorado River Peoples: the Quechan, Halchidhoma, and Mojave

The first Europeans to encounter and document the traditional inhabitants of the Lower Colorado River tribes were the Spanish, followed by American explorers. Kroeber (1920, 1925) conducted extensive fieldwork at the turn of the 20th century; in particular, he studied the Mojave tribe in the Needles area. Spanish missionary influence did not reach the desert cultures, which enabled them to retain much of their language, religion, and cultural practices. Early ethnographers were able to conduct fieldwork and documented many details about oral histories, ritual and burial practices, as well as life-ways practiced prior to contact and those during the first half of the 20th century. Malcolm Rogers studied the Colorado River Tribes in the 1930s and documented lithic and ceramic technologies.

After A.D. 1000, the Colorado River tribes appear to have become more mobile and extended their travel between the river and Lake Cahuilla; and consequently expanded their resource procurement patterns (Pendleton 1984). This resulted in the development of an extensive trail network throughout the Colorado Desert. Evidence of travel and trade is indicated by the presence of pottery drops and shrines lining the trails (McCarthy 1993). The trails network was also a major component of the tribe's belief system, interconnecting important geographical locations and ceremonial sites with song cycles and rituals.

Lithic quarries along various mountain ranges were used for tool material, springs within these mountains provided water. Several springs are located within a day's travel of the Project area, in addition to McCoy Springs, Corn and Chuckwalla Springs are less than 30 miles to the west.

The lower Colorado River region was inhabited by numerous tribes at the time of the first Spanish contact. Alarcon and Diaz were the first to travel up the Colorado River in 1540; their description of the interaction between tribes indicates shifting boundaries and inter-tribal hostilities (Forbes 1965). A later expedition by Onate in 1605 documents several tribes, including the Halchidhoma, the Quechan and the Mojave at various points along the river. By 1774, the Anza Expedition encountered the Halchidhoma living between the Mojave and Quechan territories near Parker, Arizona. Historical accounts describe constant conflict among the tribes with the Quechan and Mojave against the Halchidhoma. Ultimately, the Halchidhoma left the area and resettled in the mid-1800s in the Gila River area (Dobyns et al. 1963; Kroeber 1925).

Settlement was determined primarily by proximity to permanent water sources. Villages and camp sites were most often in the foothills and less frequently on the desert floor, depending on the availability of water. Tribal boundaries and territories were dynamic as a result of interactions and warfare between tribes (Forbes 1965).

Like some of the other river Yuman tribes, the Mojave focused on floodplain agriculture, producing close to half of their dietary needs from crops, including maize, squash, melons, beans and a variety of grasses (Bee 1983; Castetter and Bell 1951). Similarly, the Quechan also relied on agriculture as well as fish from the Colorado River. In addition, both small and large game were hunted, adding important dietary protein.

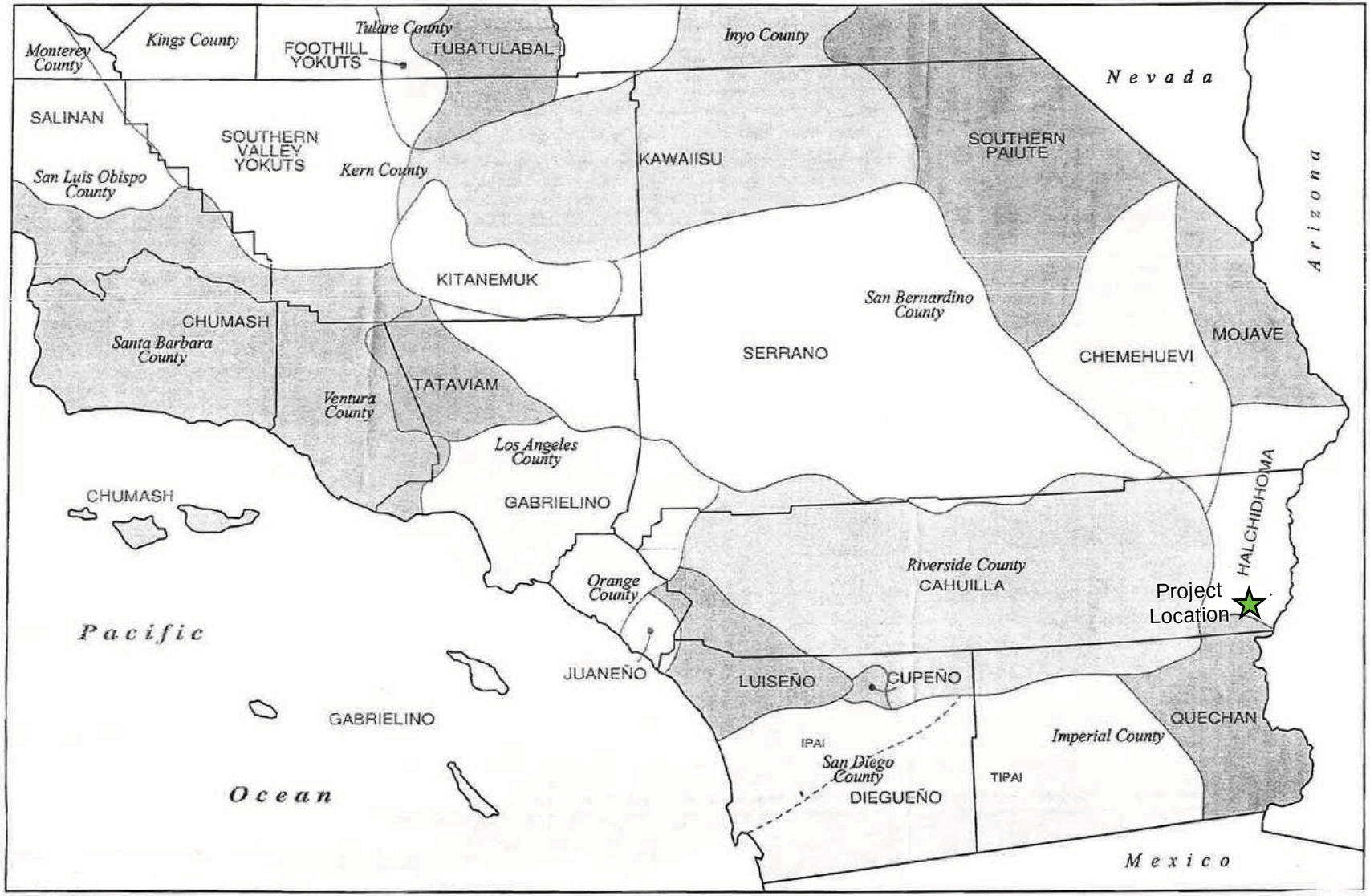


Figure 2 - Ethnographic Boundaries

The Colorado River Tribes share similar beliefs strongly linked to dreaming and ritual songs that apply to daily life and personal knowledge. These beliefs are based on real places that are visited physically or in dreams (Kroeber 1925). Forbes noted religion, cultural identity, various aspects of daily life, and the landscape on which they lived were intricately intertwined. Important ceremonial locations include intaglios, petroglyphs, lithic scatters and cleared circles along the Colorado River and in the surrounding hills. As previously mentioned, one key component of the cultural landscape is a regional trail system (Forbes 1965).

4.2.2 Chemehuevi

The Chemehuevi tribe is the southern-most group of the Southern Paiutes (Kelly and Fowler 1986). Their territory included the western side of the Colorado River into the Palo Verde Mountains and north toward Cadiz Dry Lake.

The Chemehuevi share many cultural elements with the Mojave, including habitation structures, ground stone tool types as well as spiritual beliefs. The Chemehuevi were organized in small mobile groups who traveled widely, interacting with neighboring tribes. They subsisted on small game, hunting as far west as San Bernardino, and on harvesting seasonal plant resources throughout the region. They hunted with the Quechan in Arizona and the Serrano in Tehachapi, and were reported to have hunted abalone shell in the Santa Barbara Channel and to have journeyed to the Hopi Villages (Kelly and Fowler 1986). They were not known to have used pottery but rather chose basketry and other woven implements, often decorated. The Chemehuevi who settled along the Colorado River lived in relatively permanent structures and utilized agriculture to a greater extent than related groups to the west (Laird 1976). Historically, they grew a variety of crops including vegetables, beans, winter wheat and grasses.

Chemehuevi spiritual beliefs include a sacred landscape that incorporates both the spirit world and the natural world. These rituals include songs and dreams that are the basis of their daily lives, linking their beliefs, material existence and the cultural landscape. Kroeber states that knowledge is acquired by each man according to his dreams (Kroeber 1925). The “Salt Song” describes a ceremonial trail across three states and the significance of the mountains and the medicines found in them.

4.2.3 Cahuilla

The Cahuilla are one of several groups who migrated into California from the Great Basin, although the specific time, duration, and process is unclear, it is estimated to have taken place around 1,500 BP (Kroeber 1925; Laylander 1985). The Cahuilla’s traditional territory encompassed diverse topography ranging from 273 feet below sea level at the Salton Sink to 11,000 feet AMSL in the San Bernardino Mountains. Their territory extended from the summit of the San Bernardino Mountains in the north to the Chocolate Mountains and Borrego Springs in the south. Its eastern border included the Colorado Desert west of Orocopia Mountain, and its western border included the San Jacinto Plain near Riverside and the eastern slopes of Palomar Mountain (Bean 1978).

Although the traditional territory is vast, the Santa Rosa and San Jacinto Mountains and the Coachella Valley in Riverside County are the center of the Cahuilla, including Palo Verde Mesa. Numerous land holding clans claim territory in this area, each of which ranged from the desert to the mountain areas. Clans could include more than one lineage that had independent community areas owned within the larger clan area (Wilke and Lawton 1975).

Cahuilla villages usually were in canyons or along alluvial fans near adequate sources of water and food plants. The immediate village territory was owned in common by a lineage group or band. The other lands were divided into tracts owned by clans, families, or individuals. Trails used for hunting, trading, and social interaction connected the villages. Each village was near numerous sacred sites such as rock art panels (Bean and Shipek 1978).

The Cahuilla belief system and oral tradition indicate that when Lake Cahuilla dried up, the desert floor was settled; 17 or more rancherias have been identified in Coachella Valley. These rancheria locations are associated with hand-dug wells, springs, or palm oases. Water collection and conveyance features and associated agricultural fields have been documented from the early 1800s (Wilke and Lawton 1975).

4.3 Euro-American Context

European presence in the Colorado River region began with explorations in the 16th century; however permanent settlement occurred in the mid-19th century as a result of the development of transportation and water conveyance. Exploration was primarily for travel routes in search of interior waterways and from Mexico north toward Monterey for the establishment of the California missions by the Spanish. The end of the Mexican War of 1846-1848, the discovery of gold in California in 1849, and the establishment of California as a state on September 9, 1850 all contributed to a steady influx of non-Hispanic settlers into the area. Later, mining, agriculture and military training brought settlement to the Riverside County area.

4.3.1 Transportation

Prior to the European presence in the Colorado Desert area, transportation was limited to foot trails used by the Native Americans. As the Spanish began to explore the area, these native trails and trade routes were further used and expanded. One of the more important routes, known as the Bradshaw Trail, was developed as the result of the search for gold in Southern California, specifically in the area of La Paz, along the eastern side of the Colorado River (Gunther 1984; Johnston 1972, 1987), north of the Project area. William D. Bradshaw, a forty-niner working in the San Bernardino County area, was determined to find an overland route from the Pacific Ocean to the Colorado River, where gold had been recently discovered in what is now Ehrenberg. Bradshaw had previously mined for gold in Sutter's Mill in 1849, and anticipated La Paz to become a gold strike boom-town. To accommodate the expected influx of miners headed toward La Paz, Bradshaw recruited a group of eight men to scout out a direct route (Gunther 1984; Johnston 1972, 1987).

Bradshaw worked with Chief Cabazon, the leader of the Desert Cahuilla, and a Coco Maricopa Indian mail runner to map a route using an ancient native trail that linked water sources across the Colorado Desert. The trail passed through the San Gorgonio Pass through Palm Springs, then turned south and ran through Martinez to the north side of the Salton Sink and between the Orocopia and Chocolate Mountains ranges. The route then skirted the southern edge of the Chuckwalla range crossed through the Mule Mountains and reached the Palo Verde Valley. Bradshaw also established a ferry service to cross the Colorado River and proceeded to promote his new trail and ferry enterprise (Gunther 1984; Johnston 1972, 1987). The Bradshaw Trail is 5.5 miles south of the Project area.

Also paramount to the development of the Colorado Desert was the arrival of the Southern Pacific Railroad (SPRR), a transcontinental railroad system. The SPRR was founded as a land holding company in 1865 and acquired various smaller railroad companies that would eventually link New Orleans, Texas, New Mexico, Arizona and California through Los Angeles and then north into San Francisco through to Portland, Oregon. Numerous communities sprang up along the route and greatly accommodated the mining boom in the local area (Vredenburgh et al. 1981). The railroad was instrumental in settlement of the Colorado Desert areas by providing access to immigrants as well as shipping consumer goods and produce between the east and west coasts (Fickewirth 1992). The SPRR reached Yuma, Arizona in 1877 and links north on the river were provided by commercial river boat traffic (Vredenburgh et al. 1981). Later, to facilitate the mining activities in the Blythe area, a spur was constructed to the Atchison, Topeka, and Santa Fe Blythe-Ripley Line in 1916.

4.3.2 Mining

With the signing of the Treaty of Guadalupe-Hidalgo in 1848, the U.S. Southwest came under the control of the United States. The Colorado Desert was the scene of prolonged mining from 1850, with the beginning of the gold rush in California. The small town of La Paz, 45 miles northeast of Blythe on the eastern bank of the Colorado River, was a boomtown in the 1860s (Wilson 1961). The mid-1860s saw the town of La Paz swell in population to over 5,000, but by 1870 the miners had gleaned most of the gold-bearing ore from this site.

Mining and prospecting was primarily focused in the mountains and high desert north of Blythe but small-scale mining did occur from the 1860s until after the Great Depression in the 1930s (Morton 1977). Although gold was found only in small amounts, mining of gypsum and manganese were more successful ventures. To the north in the McCoy Mountains, several significant manganese mines provided ore for armaments during both World Wars I and II (Butler 1998). Other minerals mined from the areas surrounding the Project area include fluorite, copper and uranium (E. Warren et al. 1981).

4.3.3 Homesteading and Agriculture

The passage of the Homestead Act in 1862 and the Desert Land Act in 1877 were instrumental in the settlement of the Lower Colorado River area. The Homestead Act offered the opportunity for United States citizens to file a claim on 160 acres or less of land for $1.25 per acre. The Act stipulated that the claim be for purposes of actual settlement and cultivation, and the claimant was required to 'improve' the plot by building a dwelling and cultivating the land. After five years on the land, the original filer was entitled to the property, free and clear.

The Desert Land Act was similar to the Homestead Act in that it was enacted to encourage and promote economic development of the desert lands of the Western states. This act also required the filer to irrigate and cultivate the land within three years. A married couple could pay $1.25 per acre for a maximum of 640 acres whereas a single man would receive half the land but pay the same price. Proof of irrigation was required for the filer to obtain title. This act was later revised to offer a maximum of 320 acres with proof of irrigation required within four years.

The agriculture in the Palo Verde Valley was made possible by the construction of canals and pipelines as well as the securing of water appropriations. The first irrigation project was completed in 1883, after the death of Thomas Blythe who made the first appropriation (E. Warren et al. 1981). The valley was subject to flooding until after the completion of Boulder Dam in the 1930s.

4.3.4 City of Blythe

Thomas Blythe, an Englishman, arrived in the area in 1882 in search of gold and real estate development possibilities. Having been successful in real estate investments in San Francisco, Blythe came to the Lower Colorado River area and established water rights along the Colorado River. His efforts in irrigation and cultivation of the land were successful; 40,000 acres were irrigated as a result of his diverting water from the Colorado River (Blythe Chamber of Commerce 2011). Further development of the desert lands into fertile agricultural fields continued. The city was incorporated in 1916.

4.3.5 World War II Desert Training Center/California-Arizona Maneuver Area

A comprehensive historic context for the Desert Training Center/California-Arizona Maneuver Area (DTC/C-AMA) was published by Bischoff in 2000. The following is a very brief summary of Bischoff's (2000) report.

Soon after the United States entered World War II, General George S. Patton, Jr. was assigned the task of developing a training center to prepare Army troops for combat against German forces in North Africa. Patton identified an area in the California desert that offered realistic terrain and combat conditions to train the troops. The lack of water, extreme heat and difficult terrain as well as the remote location would assist preparing troops for mobilization and combat tactics. Ultimately, training missions were both ground and air; all manner of equipment and battle strategies were tested and perfected there (Bischoff 2000).

Patton established base operations headquarters at Camp Young, near Indio, and began training troops in April 1942. The Desert Training Center (DTC) facility extended from Desert Center in California to the Colorado River, as far north as Searchlight, Nevada and as far south as Yuma, Arizona. To accommodate the massive number of troops brought to the region, several desert airfields were taken over by the Army in 1942, including the airfield that was to become Blythe Army Air Base (BAAB).The name of the DTC was changed to the California-Arizona Maneuver Area (C-AMA) in October 1943, and the mission of the C-AMA was expanded to include simulation of large-scale operations and logistics beyond exclusively desert warfare tactics.

The DTC/C-AMA consisted of 11 major camps, of which seven were in California and four were in Arizona. The largest camps, Camp Iron Mountain, Camp Granite, and Camp Coxcomb, were north of Desert Center. All of the facilities were connected by railroads and major roads (Vredenburgh 1981).

The DTC/C-AMA was where actual battle simulation was first used. The training offered in surviving the elements, tactical mobility and mastering ordinance and engagement provided unparalleled experience for troops and commanding officers. In April 1944 the facilities began evacuations and closing, eventually being turned back to the U.S. Department of the Interior and private landowners (Bischoff 2000).

4.3.6 Blythe Army Air Base

The Project area is on the eastern side of BAAB that, beginning in 1942, supported the military training missions associated with the DTC/C-AMA and later provided aerial bombardment training between 1942 and 1944. As a cultural resource, BAAB was documented in 2010 as P-33-18837 and evaluated for the NRHP (Mitchell 2010). This report provides a brief summary based on Mitchell (2010) and Wilson (2008; personal communication 2011).

Under the Civil Aeronautics Act of 1938, the Civil Aeronautics Administration (CAA) was charged with developing civilian airfields throughout California that could be used for defense. BAAB had humble beginnings in 1940 as a private, unpaved airstrip, originally known as Intermediate Flying Field Site 21. In addition, Site 21 was intended for emergency landings for flights between Los Angeles and Phoenix. The following year (1941) the Works Progress Administration (WPA) provided funds to upgrade the airfield to two paved runways as part of the National Defense Program, with Riverside County sponsoring the project and maintaining the airfield.

In February 1942, General Patton was tasked to identify a location suitable for training troops in desert warfare as preparation for deployment to North Africa. The selected location became the DTC/C-AMA (see Section 4.3.4) . Construction was planned for DTC airfields at Thermal, Desert Center, Rice and Shaver's Summit (now Chiriaco Summit). Because construction for the Site 21 airfield outside Blythe was already underway, it was incorporated into General Patton's DTC/C-AMA operation and used immediately for air support until the four new airfields became operational.

On April 7, 1942, approval was given for Site 21 to become BAAB, and improvements were begun in preparation for the arrival of the 46th Bombardment Group, whose initial mission was to provide medium bomber crews in support of Patton's rigorous desert warfare training. This group was joined by the 3rd

Observation Squadron to perform observation missions in support of the army ground forces on maneuvers at the DTC. For five months, General Patton oversaw the operations of the DTC/C-AMA, including BAAB. In September 1942, General Henry "Hap" Arnold and Lt. Col. Richard Lee took over command of the base from General Patton; by the end of that year the base population was 800 officers and 5,400 enlisted men. (Wilson 2008).

Construction continued on the base throughout 1942; by December a deep water well, a small hanger, an engineering building, the base theater, four warehouses and 60 barracks had been completed, and four runways with aprons had been paved and were in use. However, by the end of 1942, DTC airfields were operational at Thermal, Rice and Desert Center and support from BAAB was no longer needed. At that point, BAAB was relieved of its DTC air support role and changed to heavy bomber training under the 2nd Air Force. The 34th Bombardment Group was assigned to BAAB; its mission was training in B-17 Flying Fortress and B-24 Liberator aircraft (Wilson 2008). In total, BAAB's direct association with the DTC/C-AMA lasted eight months, from April 1942 to the end of the same year, and its association with General Patton lasted only five months.

In 1943, the base hospital, an officer's club and the pool were opened for use. Also, a mess hall, a base chapel, a barber shop and additional hangers were completed. Numerous bombardment groups trained at the base for the next two years. Included in the troops assigned to the base for short periods were the Women's Army Auxiliary Corps (WAAC) and the 99th Fighter Squadron, also known as the Tuskegee Airmen (Wilson 2008).

By March 1944, the training mission at BAAB began to gear down. Most of the troops had completed training and were deployed to new assignments; no new crews were being assigned to BAAB for training. The DTC was closed in April 1944; BAAB became an alternative landing site for March Field in Riverside. BAAB remained staffed for providing emergency landing for airplanes unable to land at their designated home fields due to weather. By October 1945, BAAB was downgraded to an airfield, being closed and surplus government property the following year. It continued to be used for various training purposes until 1948 when the government transferred the property to the County of Riverside, which currently operates a portion of the property as the Blythe Airport. Farming on the airfield property during the 1970s and 1980s destroyed most of the original buildings and features (Wilson 2008).

4.4 Research Goals

The goal of the inventory and analysis is to provide the BLM and the County of Riverside with information with which to assess potential effects to NRHP and CRHR-eligible archaeological sites and architectural resources within the Project APE to support compliance with the NHPA, NEPA, and CEQA.

This research design guides the interpretation of cultural resources within the Project APE and helps in evaluating their eligibility to the NRHP and CRHR (see Section 6.0). The key research questions presented below address: 1) prehistoric chronology; 2) prehistoric settlement and subsistence; 3) interaction of Native Americans with Europeans and Euroamericans; and 4) 20th century use.

4.4.1 Prehistoric Chronology

Chronology is a key component in understanding prehistoric cultural change in the Palo Verde Valley/Colorado Desert area. In the past, archaeologists in this region have had sparse data to draw from, relying primarily on artifact cross-dating and other relative dating techniques rather than absolute dating techniques.

Research Questions

1. Do diagnostic artifacts from sites in the Project area occur in sufficient numbers and in suitable contexts to allow reliable cross-dating with archaeological sites elsewhere in the Palo Verde Valley/Colorado Desert area?
2. Do artifacts and other evidence from archaeological sites indicate Paleoindian, Archaic or Late Prehistoric period occupation or use of the Project area?
3. Can the characteristics and contexts of ceramics in the Project area allow further refinement of chronological change within the Late Prehistoric Patayan Complex?

Data Requirements

The ages of prehistoric sites can best be determined by using absolute-dating technologies, such as radio-carbon dating of botanical and faunal remains or archaeomagnetic dating of fired clay found in thermal features. Obsidian hydration analysis of tools can sometimes be used for dating sites. Sites containing these types of data (i.e., botanical and faunal remains, thermal features, abundant obsidian) from interpretable contexts are rare in the archaeological record of the Colorado River area.

Relative dating techniques, such as the comparison of ceramic and projectile points found in the Project area with datable types from other regions, can be used to determine the approximate age of artifact collections. In general, the larger the artifact collection one has from a single discrete context or site, the more confidence one will have in the estimated age of the collection. However, while some projectile point and pottery types are excellent chronological markers, the age ranges for other tool types may be very broad, spanning thousands of years.

4.4.2 Prehistoric Settlement and Subsistence

Because of the desert environment, prehistoric settlement and cultural use of the area would have typically been close to reliable water sources or along travel routes between water sources. In addition, for Paleoindian, Archaic and Late Prehistoric period cultures, as well ethnographic cultures, resource gathering strategies would also have been affected by the size and distribution of the human population and the types of plant, animal, lithic and other resources available for exploitation.

Research Questions

1. Did chronological variation in the types of resources exploited reflect environmental change, technological change, or fluctuations in the size and distribution of the human population?
2. Do archaeological sites in the Project area represent base camps, temporary camps, or specific task-related loci?
3. What environmental variables (e.g., water, natural habitats) influenced the use of the site or the distribution of the human population?
4. Are the distribution of prehistoric sites and the contents of the sites associated with known prehistoric trails?

Data Requirements

Faunal and botanical remains from a site indicate the resources available at the particular time and location and their relative importance to the occupants. Temporary camps would typically contain the remains of resources found in the vicinity, while remains from base camps would reflect a wider catchment area. Sourcing of raw materials used for stone tools and the different raw materials identified during debitage analysis can indicate either trade with other prehistoric groups or travel to and use of quarry sites. The presence of thermal features, such as roasting pits; of processing features, such as grinding surfaces; of certain types of tools; and of possible hunting blinds would indicate specific subsistence activities. A regional analysis of the artifacts found at sites may reveal patterns how often

certain artifact or raw material classes are associated with trails, which may in turn indicate trade among groups.

4.4.3 Interaction of Native Americans with Europeans and Euroamericans

The first documented accounts of contact between Native Americans and Spanish explorers are from the mid-18th century, followed by accounts of interaction with Euroamericans in the 19th century. Non-native settlement in the Palo Verde Valley began in the mid-19th century with the influx of mining and homestead activities. Euroamerican settlement and land use practices had profound effects on the native populations.

Research Questions

1. Is there evidence of early European (i.e. Spanish) activity at archaeological sites in the Project area?
2. Do any archaeological sites in the Project area contain artifacts or other evidence suggesting 18th or 19th-century occupation by Native Americans?
3. How did Native American and Euroamerican populations interact, and how did this interaction change as Euroamerican population increase?
4. How did the subsistence practices of Native Americans in the Project area change after Euroamericans land use practices had altered the distribution and abundance of natural resources?
5. How did the introduction of Euroamerican agriculture and domesticated animals affect the artifact assemblages found at Native American sites?
6. How did the Euroamerican mining and transportation activities affect traditional tribal practices?

Data Requirements

Information to address these research questions would most likely be found in Native American habitation sites, should they exist within the Project area. Evidence would be based on how stone tools, pottery, and plant and animal remains at sites from the 19th century compare to similar artifacts and food remains at Late Prehistoric sites. Refuse-filled features with depositional integrity and recognizable association to the specific activities would be of particular value for such an analysis. Particularly valuable would be undisturbed features or other contexts with both Native American and Euroamerican artifacts.

4.4.4 20th Century Use

Major events of the twentieth century in the Project vicinity include small-scale mining, development of roads and railroads, implementation of the Homestead Act of 1862 and Desert Land Act of 1877 and subsequent agricultural activities, and World War II training activities related to the DTC/C-AMA and BAAB.

Research Questions

1. How were land improvements first made under the Homestead Act and Desert Land Act affected by later development of extensive irrigation systems in the Blythe area?
2. Did historic settlement and use of the project area change as transportation into the Blythe area improve?
3. Did the reduced incidence of flooding brought on by the construction of Boulder Dam in the 1930s affect land use in the Project area?
4. Are there differences in the location and contents of archaeological resources associated with the DTC/C-AMA and those associated strictly with BAAB after it was no longer tied to the DTC/C-AMA?

Data Requirements

Research questions related to the twentieth century can often best be answered through archival research supplemented by archaeological data. Existing archaeological information pertaining to the twentieth century use of Palo Verde Valley is minimal, as few historic cultural resources of this period in the surrounding area have been investigated. However, historic artifacts and sites can be used to verify the accuracy of some historic records and maps, to pinpoint locations of documented features, and to understand how land use practices have changed. The locations of individual homesteads and mining claims may be associated with historic roads. Survey and site recording can verify whether facilities shown on World War II-era maps of BAAB are still standing, still exist only as rubble and artifact scatters, or perhaps were never actually built.

5.0 INVENTORY METHODS

5.1 Historic Background and Records Search

POWER conducted a records search at the Eastern Information Center (EIC), housed at the University of California, Riverside (UCR) on April 7, 2011. California Historical Resources Information System (CHRIS) records were reviewed to determine the location of previously recorded archaeological and architectural resources and the locations of prior cultural resource surveys within one mile of the Project APE. Also consulted were the NRHP, Archaeological Determinations of Eligibility (ADOE) provided by the EIC, CRHR, CHL lists, and the California Points of Historic Interest (CPHI). In addition, the online BLM General Land Office (GLO) patent information was consulted. Also consulted were Art Wilson, a local historian, the General George S. Patton Memorial Museum and the Palo Verde Historical Museum and Society.

5.2 Field Methods

POWER conducted a BLM Class III archaeological and historic built environment survey of 3,660 acres of lands within the Project boundary that include the 125-foot ROW of the proposed 230 kV transmission line. These lands included private and BLM-managed public lands. During the surveys, archaeologists walked parallel transects, using 15-meter (50-foot) intervals, to identify archaeological and architectural resources within or adjacent to the APE. The ground surface was visually examined for evidence of prehistoric or historic archaeological materials and historic structures. Visible ground surfaces were examined, including fence lines, drainage channels, and other exposures. No subsurface survey (e.g., shovel test pits) was conducted by POWER. A sub-meter Global Positioning System (GPS) was used to identify the location of each cultural resource. A 235-acre parcel surveyed in 2011 was later removed from the Project APE due to design changes. Sites identified within this parcel are described in this report but will not be affected by the Project. The parcel eliminated from the Project is APN 879090052.

Isolated finds, typically three or fewer prehistoric artifacts of the same type (e.g., flakes or sherds), for five or fewer historic artifacts (e.g., cans, bottle glass) were recorded at the time of discovery by collecting GPS data, photographs and measurements of the artifacts. Archaeological sites, typically four or more prehistoric artifacts or six or more historic artifacts within a 10 meter square area, were point-located when discovered and later recorded in more detail during the second field session. Overview photographs of survey areas and comprehensive field notes were also taken.

All field methods were discussed with and reviewed by County Archaeologist, Leslie Mouriquand. The survey on BLM land was performed under Cultural Resource Use Permit (CRUP) #CA-09-36 and Fieldwork Authorization #66.66 11-18.

The archaeological field survey was conducted in three sessions between April and June, 2011. A site visit was attended by POWER archaeologists Jim Rudolph, Gini Austerman, and Dan Woodward on September 7, 2011; a site visit was conducted by Ms. Mouriquand and Riverside County Historic Preservation Officer, Keith Herron on November 22, 2011.

5.3 Native American Communication

Tribal consultation required under Section 106 of the NHPA is ongoing and is being performed by the BLM on a government-to-government basis. Section 106 Tribal consultation is not discussed in this report.

In April 2011, POWER sent a letter to the NAHC requesting information regarding Native American groups with historic ties to, and interest in, the proposed Project area. In May 2011, 20 letters were sent to the tribes identified by the NAHC, which are listed in Table 4. The letter provided a brief description of

the proposed Project and requested information concerning Native American cultural resources in the Project area, as well as any comments or concerns about the Project.

Table 4. Native American Tribes Contacted

AFFILIATION	REPRESENTATIVE
Agua Caliente Band of Cahuilla Indians	Patricia Tuck, THPO
AhaMaKav Cultural Society, Fort Mojave Indian Tribe	Linda Otero, Director
Ah-Mut-Pipa Foundation (Quechan Kumeyaay)	Preston J. Arrow-weed
Augustine Band of Cahuilla Mission Indians (Cahuilla)	Mary Ann Green, Chairperson
Augustine Band of Cahuilla Mission Indians (Cahuilla)	Karen Kupcha
Cahuilla Band of Indians	Luther Salgado, Sr. Chairperson
Chemehuevi	Joseph R. Benitez (Mike)
Chemehuevi Reservation	Charles Wood, Chairperson
Cocopah Museum/Cultural Resources Dept. (Cocopah)	Jill McCormick, Tribal Archaeologist
Colorado River Indian Tribe (Mojave, Chemehuevi)	Ginger Scott, Museum Curator; George Ray, Coordinator
Fort Mojave Indian Tribe (Mojave)	Mr. Tim Williams, Chairperson
Fort Mojave Indian Tribe (Mojave)	Nora McDowell, Cultural Resources Coordinator
Fort Yuma Quechan Indian Nation (Quechan)	Michael Jackson, President
Morongo Band of Mission Indians (Cahuilla, Serrano)	Michael Contreras, Cultural Heritage Program
Quechan Indian Nation	Bridget Nash-Chrabascz, THPO
Ramona Band of Cahuilla Mission Indians (Cahuilla)	Joseph Hamilton, Chairman
San Manuel Band of Mission Indians (Serrano)	Ann Brierty, Policy/Cultural Resources Dept.
Santa Rosa Band of Mission Indians (Cahuilla)	Mayme Estrada, Chairwoman
Torres-Martinez Desert Cahuilla Indians (Cahuilla)	Diana L. Chihuahua, Vice Chairperson, Cultural
Twentynine Palms Band of Mission Indians (Chemehuevi)	Darrell Mike, Chairperson

In November 2011, a Notice of Preparation of an EIR (NOP) was sent via certified mail to 22 Native American Tribes (20 Tribes listed above and additional contacts from the Colorado River Indian Tribe and Torres Martinez Desert Cahuilla Indians). The NOP described the proposed Project and location, environmental review process, potential environmental effects, and contact information, and announced the time and location of the public scoping meeting.

On May 10, 2012, the Applicants hosted an information meeting in Palm Desert and invited Native American groups to attend. Representatives of the Colorado River Indian Tribes, Augustine Band of Cahuilla Indians, Agua Caliente Band of Cahuilla Indians, and Mohave Elders Management attended. Information was presented to them about the Project and about the results of the cultural resource investigations, and the representatives asked questions and expressed concerns. This meeting was an informal coordination meeting with the Applicants only and was not part of BLM government-to-government consultation.

6.0 INVENTORY RESULTS

6.1 Results of Background Research and Record Search

The official federal land record site available through the BLM GLO web site (www.glorecords.blm.gov) patent list was reviewed on June 15, 2011 for homestead information within a one-mile radius of the Project. This land record data can provide background information related to the type of land grant filed, acreage amount and date of issuance. The information is organized by the Township, Range and Section numbers rather than by the APN. One hundred and four (104) land patents were filed within portions of the Project areas between 1911 and 1957; most of the land patents were granted under the Homestead Entry Act of 1862 and the Desert Land Act of 1877. The results are listed in Table C-1 in Appendix C. GLO maps for this part of California were not found online, so it was not possible to use the locations of improvements as a guide for identifying and interpreting historic archaeological sites. Historic military maps and aerial photographs of BAAB were also reviewed (Wilson 2008).

The record search conducted by POWER in March 2011 at the EIC indicated 25 cultural resource studies were previously conducted within one mile of the Project area, eight of which are within or adjacent to the Project. Approximately 20 acres within the current Project had been previously surveyed (RI-03029 and RI-04061); one archaeological site (P-33-009186) and two standing structures (P-33-012532 and P-33-014083) had been previously documented as a result of these studies. The reports are listed in Table 5, and Figure 3 illustrates the areas previously surveyed.

As a result of the record searches performed in April 2011, 82 previously recorded archaeological resources and historic built resources were identified within one mile of the Project (i.e., solar field and proposed transmission line. Information on these resources is presented in Table 5. Of the 82 resources, 28 are prehistoric (16 archaeological sites and 12 isolated finds), 48 are historic (30 archaeological sites, 10 isolated finds, seven built resources, and one district) and 6 are both prehistoric and historic (five archaeological sites and one isolated find). For the purposes of this report, only archaeological and built resources within the Project APE were analyzed.

Three of the 82 cultural resources are within the Project APE. All three are historic (P-33-009186, a refuse deposit recorded in 1999; P-33-012532, a transmission line recorded in 2005; and P-33-014083, a transmission line recorded in 2000). One historic district, the Blythe Army Air Base Historic District (P-33-018837), was recorded in 2010 adjacent to but not within the current Project boundary. These four resources are further described in Section 6.2. One prehistoric site (P-33-018821) appeared to fall within the APE but was incorrectly mapped by the EIC. The previously recorded archaeological and built resources are listed in Table 6; and Figure 4 (in Appendix D) illustrates recorded archaeological resources and standing structures within one mile of the Project APE.

The records search indicates that many prehistoric sites consisting of lithic and ceramic artifact scatters have been documented within a one-mile radius of the Project. The historic sites appear primarily to be refuse deposits and the remains of the World War II training use of the area. POWER anticipated encountering these types of archaeological sites during the survey of the Project area.

Table 5. Previous Cultural Resource Studies within One Mile of Project Area

REPORT NUMBER	AUTHOR	YEAR	TITLE	NUMBER OF IDENTIFIED CULTURAL RESOURCES	WITHIN APE
RI-00220	Cowen, R.A., and K. Wallof	1977	Interim Report Field Work and Data Analysis: Cultural Resource Survey of the Proposed Southern California Edison Palo Verde-Devers 500 kV Transmission Line	7	
RI-00243	von Werlhof, J., and Howard Pritchett	1977	Archaeological Examinations of Mesa Drive into Sundesert Sites, An Addendum Report	0	
RI-02210	Underwood, J., J. Cleland, C.M. Wood, and R. Apple	1986	Preliminary Cultural Resources Survey Report for the US Telecom Fiber Optic Cable Project, From San Timoteo Canyon to Socorro, Texas: The California Segment	13	
RI-03029	Padon, B., S. Crownover, J. Rosenthal, and R. Conrad	1990	Cultural Resources Assessment Southern California Gas Company Proposed Line 5000, Riverside County, California	14	X
RI-03410	Keller, J.A.	1991	A Phase II Investigation of Ca-RIV-4173, Tentative Parcel Map 26395	1	
RI-03418	Broeker, G.	1991	Cultural Resource Inventory Report: Gosser Exchange	0	
RI-03735	Keller, J.A.	1993	A Phase I Archaeological Assessment of General Plan Amendment 380/Change of Zone 6198, 46.21 acres of Land Near Blythe, Riverside County, California	0	
RI-04061	McDonald, M., and J. Schaeffer	1998	Cultural Resources Inventory of 1542 Acres of Palo Verde Mesa Palo Verde Valley Catellus/Bureau of Land Management Land Exchange Area	11	X
RI-04415	Pigniolo, A., M. Baksh, and J. Dietler	1999	Cultural Resource Survey for the Blythe Energy Project, Riverside County, California	9	
RI-04768	Pigniolo, A., and S. Murphy	2001	Cultural Resource Survey Report for the Blythe Water Project, Riverside and Imperial Counties, California	22	X
RI-04784	von Werlhof, J.	2004	Archaeological Examinations of Mesa Verde Pipeline Improvement	1	
RI-06181	Wahof, T., and J. Cleland	2002	Addendum 13 to Cultural Resources Overview and Survey for the North Baja Gas Pipeline Project, Negative Cultural Resources Survey of One Temporary Extra Work Space	0	
RI-06184	Apple, R.M.	2001	Addendum 4 to Cultural Resources Overview and Survey for North Baja Gas Pipeline Project, Archaeological Survey of an Interconnection, A Temp. Workspace for the Colorado River Crossing, Extra Work Spaces Along 18th Ave. & an Access Road	1	
RI-06185	Underwood, J.	2000	Cultural Resources Overview and Survey for the Proposed Alignment of the North Baja Gas Pipeline: Addendum 1, Archaeological Survey of Ancillary Facilities	2	

REPORT NUMBER	AUTHOR	YEAR	TITLE	NUMBER OF IDENTIFIED CULTURAL RESOURCES	WITHIN APE
RI-06186	Kirkish, A., R.M. Apple, J. Underwood, and J. Cleland	2000	Cultural Resources Overview and Survey for the Proposed Alignment of the North Baja Gas Pipeline	0	
RI-06707	McDougall, D., J. George, and S. Goldberg	2006	Cultural Resource Surveys of Alternative Routes within California for the Proposed Devers-Palo Verde 2 Transmission Project	43	
RI-07405	Keller, J.A.	2007	A Phase I Cultural Resources Assessment of Tentative Parcel Map 35085 in Blythe, Riverside County, California, USGS Ripley, California Quadrangle, 7.5' Series	0	
RI-07790	Schaefer, J.	2003	A Class II Cultural Resources Assessment for the Desert-Southwest Transmission Line, Colorado Desert, Riverside and Imperial Counties, California	0	X
RI-08232	Pigniolo, A.	2003	Assessment of Effects to CA-RIV-6370H from Proposed Riverside Avenue Drain Improvements, Blythe, California	1	
RI-08410	Carrico, R., K. Walker, and W. Eckhardt	2004	Draft Cultural Resources Inventory of the Proposed Devers to Palo Verde II 500 kV Transmission Line, Riverside County, California	42	
RI-08411	Farrell, J., F. Budinger, and R. Carrico	2009	Final Amendment to Cultural Resources Inventory of the Proposed Blythe Energy Project Transmission Line, Riverside County, California	14	X
RI-08417	Giacomini, B., M. Murray, and N. Stewart	2002	A Cultural Resources Inventory of Selected Properties along Public Routes from Twentynine Palms, California to Yuma Proving Ground, Arizona, in Support of Operation Desert Scimitar 2002: First Marine Division, Camp Pendleton, California	1	
RI-08439	Leftwich, B.	2008	Phase I Archaeological Assessment: Blythe Solar 1 Project, Riverside County, California	2	X
RI-08440	Leftwich, B.	2008	Phase II Archaeological Assessment: CA-RIV-8953 Blythe Solar 1 Project, Riverside County, California	1	X
RI-07753	Schaefer, J., D. Pallette, and J. Eighmey	1998	A Cultural Resources Inventory and Evaluation of the Parker-Blythe 161 kV Transmission Line No. 2 Riverside & San Bernardino Counties, California	13	X

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Figure 3 – Previous Cultural Resource Surveys

Legend

- Proposed Solar Facility
- Colorado River Substation
- Proposed Transmission Line
- One-Mile Record Search Buffer
- Township Line
- Section Line
- Cultural Resource Survey
- 4061 — Cultural Resource Survey Report Number (refer to Table 5, Section 6.1 for key to report numbers)"

N W E S

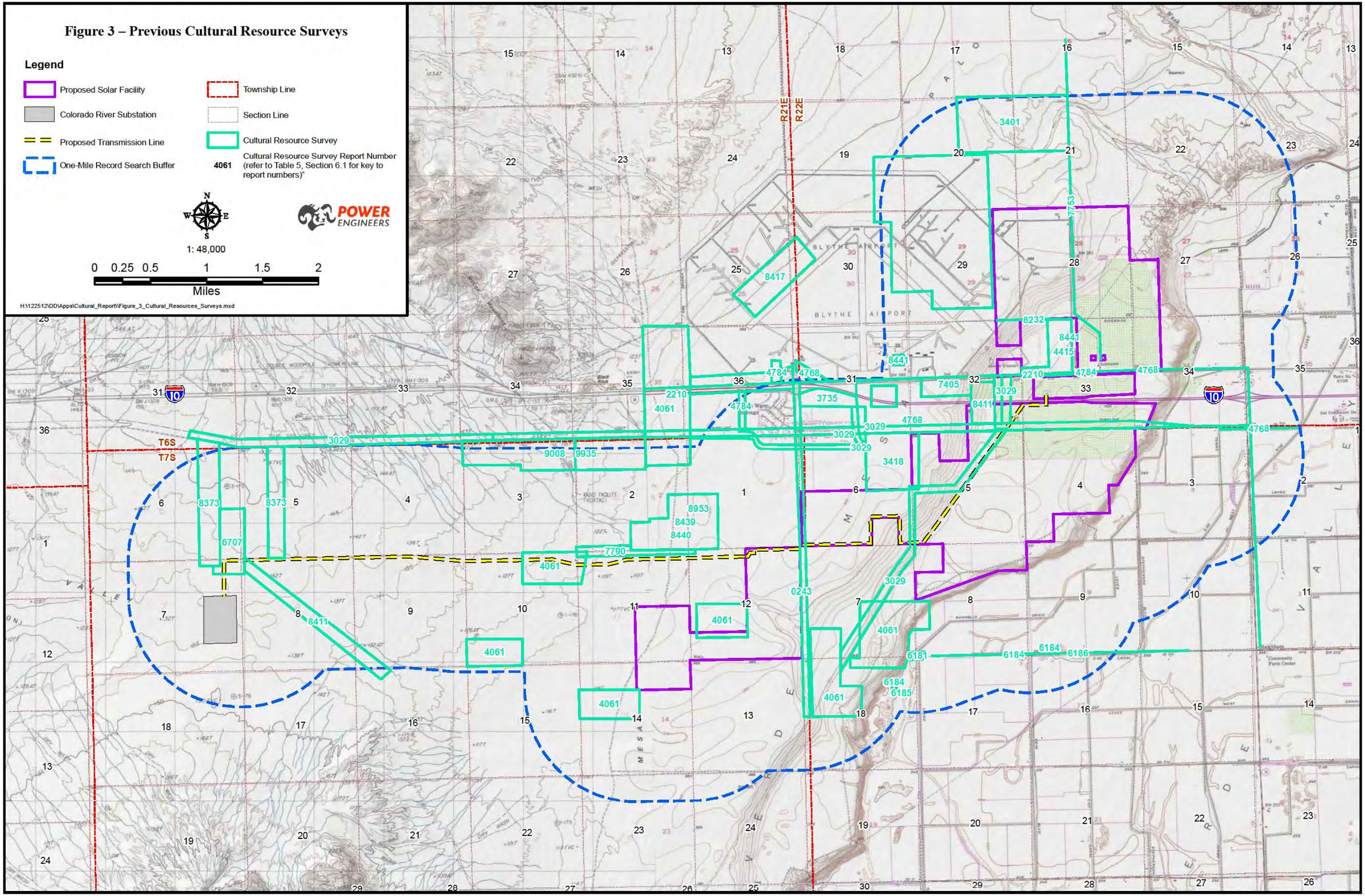
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Table 6. Previously Recorded Cultural Resources within One Mile of the Project APE

PRIMARY NUMBER	TRINOMIAL	SITE DESCRIPTION	AGE	Within APE
P-33-001481	CA-RIV-1481	Sherds, pot drop	Prehistoric	
P-33-001819	CA-RIV-1819	Chert quarry	Prehistoric	
P-33-002795	CA-RIV-2795	Lithic scatter	Prehistoric	
P-33-002796	CA-RIV-2796	Lithic scatter	Prehistoric	
P-33-008136	CA-RIV-6046	Lithic and ceramic scatter:	Prehistoric	
P-33-008137	CA-RIV-6047	Lithic scatter	Prehistoric	
P-33-009182	CA-RIV-6366H	Refuse scatter	Historic	
P-33-009183	CA-RIV-6367H	Refuse scatter	Historic	
P-33-009184	CA-RIV-6368H	Refuse scatter	Historic	
P-33-009185	CA-RIV-6369H	Refuse scatter	Historic	
P-33-009186	CA-RIV-6370H	Refuse scatter	Historic	X
P-33-009187	--	Isolated find - flake	Prehistoric	
P-33-009189	CA-RIV-9189	Isolated find – core	Prehistoric	
P-33-010862	CA-RIV-6575	Pot drop; World War II refuse scatter.	Prehistoric/Historic	
P-33-011057	--	Rannels Drain, canal	Historic	
P-33-011110	--	Blythe to Knob Transmission Line	Historic	
--	CA-RIV-6725H	Refuse scatter	Historic	
P-33-012532	CA-RIV-7127H	Niland-Blythe 161 kV Transmission Line	Historic	X
P-33-013672	--	Lithic scatter	Prehistoric	
P-33-014082	--	Parker-Blythe #2 161 kV Transmission Line	Historic	
P-33-014083	--	Parker-Headgate Rock-Blythe 161 kV Transmission Line	Historic	X
P-33-014150	CA-RIV-9100H	Two-track road	Historic	
P-33-014175	--	Isolated find - sherds	Prehistoric	
P-33-017205	CA-RIV-8952	Refuse scatter	Historic	
P-33-017206	CA-RIV-8953	Thermal feature - hearth	Prehistoric	
P-33-017312	CA-RIV-9005H	Refuse scatter	Historic	
P-33-017315	--	World War II refuse scatter	Historic	
P-33-017318	CA-RIV-9008	Lithic scatter	Prehistoric	
P-33-017319	CA-RIV-9009H	Refuse scatter	Historic	
P-33-017320	CA-RIV-9010	Lithic scatter	Prehistoric	
P-33-017323	CA-RIV-9011H	Refuse scatter	Historic	
P-33-017864	--	Isolated find - flake	Prehistoric	
P-33-017865	--	Isolated find - flake	Prehistoric	
P-33-017866	--	Isolated find - flake	Prehistoric	
P-33-017915	CA-RIV-9457	Isolated find - bottle	Historic	
P-33-017916	CA-RIV-9457	Refuse scatter - bottles	Historic	
P-33-017954	--	Isolated find - flake, ceramic mug	Prehistoric/Historic	
P-33-018052	CA-RIV-9276H	Refuse scatter - cans	Historic	
P-33-018053	CA-RIV-9277H	World War II refuse scatter	Historic	
P-33-018057	CA-RIV-9281H	World War II refuse scatter	Historic	
P-33-018058	CA-RIV-9282H	Refuse scatter	Historic	
P-33-018059	CA-RIV-9283H	Refuse scatter, lithic scatter, ceramic scatter	Prehistoric/Historic	
P-33-018060	CA-RIV-9284H	Refuse scatter, ceramic scatter	Prehistoric/Historic	
P-33-018063	--	Isolated find - can	Historic	
P-33-018064	--	Isolated find – pot sherd	Prehistoric	
P-33-018066	--	Isolated find – pocket knife	Historic	
P-33-018067	--	Isolated find – bottle base, 1942	Historic	
P-33-018068	--	Isolated find – bottle base	Historic	
P-33-018069	--	Isolated find – 1917 survey marker	Historic	
P-33-018071	--	Isolated find – 1917 survey marker	Historic	

PRIMARY NUMBER	TRINOMIAL	SITE DESCRIPTION	AGE	Within APE
P-33-018661	--	Fence	Historic	
P-33-018815	--	Isolated find - flake	Prehistoric	
P-33-018816	--	Isolated find - core	Prehistoric	
P-33-018817	--	Isolated find - flake	Prehistoric	
P-33-018819	--	Lithic scatter	Prehistoric	
P-33-018820	--	Refuse scatter	Historic	
P-33-018821	--	Lithic scatter	Prehistoric	
P-33-018837	--	Blythe Army Air Base Historic District	Historic	
P-33-018850	CA-RIV-9646	World War II refuse scatter,	Historic	
P-33-018851	CA-RIV-9647	Pre- and post-World War II refuse scatter	Historic	
P-33-018852	CA-RIV-9648	Pre- and post-World War II refuse scatter	Historic	
P-33-018853	CA-RIV-9649	World War II refuse scatter	Historic	
P-33-018854	CA-RIV-9650	World War II refuse scatter	Historic	
P-33-018855	CA-RIV-9651	Refuse scatter	Historic	
P-33-018914	CA-RIV-9983	17 mile pipeline and Pipeline Road	Historic	
P-33-018915	CA-RIV-9981	Two track road	Historic	
P-33-018935	CA-RIV-9982	Two track road	Historic	
P-33-018972	CA-RIV-9761	World War II refuse scatter	Historic	
P-33-018973	CA-RIV-9762	World War II refuse scatter	Historic	
P-33-018974	CA-RIV-9763	World War II refuse scatter	Historic	
P-33-019010	CA-RIV-9799	World War II refuse scatter, ceramic scatter	Prehistoric/Historic	
P-33-019011	CA-RIV-9800	World War II refuse scatter, mano	Prehistoric/Historic	
P-33-019012	CA-RIV-9801	Refuse scatter, World War II, pot drop	Prehistoric/Historic	
P-33-019020	CA-RIV-9809	Lithic scatter	Prehistoric	
P-33-019021	CA-RIV-9810	Lithic scatter	Prehistoric	
P-33-019045		Isolated find – pot sherd	Prehistoric	
P-33-019189		Isolated find – tested cobble	Prehistoric	
P-33-019325		Isolated find - bottle	Historic	
P-33-019326		Isolated find - bottle	Historic	
P-33-019390		Ceramic scatter	Prehistoric	
P-33-019612		Refuse scatter	Historic	
P-33-019618	CA-RIV-9935	Lithic scatter, cleared area	Prehistoric	

6.2 Results of Survey

A total of 35 resources were recorded or updated as part of the BLM Class III survey, as described in Table 7, including four previously recorded resources, seven newly recorded archaeological sites and 24 isolated finds. The resources are both prehistoric and historic. Of the seven archaeological sites, two are prehistoric and five are historic. Of the isolated finds, 17 are historic, six are prehistoric (four contain ceramic sherds, one contains a hammerstone, and the other a tested cobble), and one contained both prehistoric and historic artifacts. Four of the newly recorded resources (P-33-019998, P-33-020002, P-33-020018, and P-33-020019) were within a parcel later removed from the Project, so the resources are now outside the APE. One previously recorded site, P-33-018821, was incorrectly mapped by the EIC and was initially thought to be within the APE. The correct location is actually near the western boundary of the Blythe Army Air Base Historic District outside the Project APE.

During the field survey, four previously documented cultural resources were revisited and their site records updated. These sites are:

- **P-33-009186:** A large World War II-era refuse deposit
- **P-33-012532:** Niland-Blythe 161 kV Transmission Line

- **P-33-014083:** Parker-Headgate Rock-Blythe 161 kV Transmission line
- **P-33-018837:** Blythe Army Air Base Historic District, previously recorded up to but not within the Project boundary.

All resources were updated on Department of Parks and Recreation (DPR) forms, photographed and given updated location maps. The DPR forms can be found in Appendix B. Locations of the identified cultural resources are shown on Figure 5 (see Appendix D).

Table 7. All Cultural Resources within the Project APE*

PRIMARY NUMBER	TRINOMIAL	DESCRIPTION	AGE	NRHP/CRHR ELIGIBILITY RECOMMENDATIONS
Within Current Project Boundaries				
P-33-009186		Refuse scatter	Historic	Not Eligible
P-33-012532		Transmission line	Historic	Not Eligible
P-33-014083		Transmission line	Historic	Not Eligible
P-33-018837		Blythe Army Air Base Historic District	Historic	Contributing Elements, Eligible
P-33-019996	CA-RIV-10165	Refuse scatter	Historic	Not Eligible
P-33-019997	CA-RIV-10166	Refuse scatter	Historic	Not Eligible
P-33-019999	CA-RIV-10168	Refuse scatter	Historic	Not Eligible
P-33-020000	CA-RIV-10169	Refuse scatter	Historic	Not Eligible
P-33-020001	CA-RIV-10170	Ceramic scatter	Prehistoric	Not Eligible
P-33-020003		Isolated find - 1 bottle	Historic	Not Eligible
P-33-020004		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020005		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020006		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020007		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020008		Isolated find - 3 hole-in-top cans, 2 sanitary cans	Historic	Not Eligible
P-33-020009		Isolated find - 1 bottle fragment	Historic	Not Eligible
P-33-020010		Isolated find - 2 hole-in-cap cans, 1 tin, 2 glass fragments	Historic	Not Eligible
P-33-020011		Isolated find - 1 hole-in-top can, 1 tin, 2 glass fragments	Historic	Not Eligible
P-33-020012		Isolated find - 2 hole-in-top cans, 1 tobacco tin	Historic	Not Eligible
P-33-020013		Isolated find - 1 sherd, 1 hole-in-top can	Prehistoric/Historic	Not Eligible
P-33-020014		Isolated find - 2 sherds	Prehistoric	Not Eligible
P-33-020015		Isolated find – 1 hammerstone	Prehistoric	Not Eligible
P-33-020016		Isolated find - 1 sherd	Prehistoric	Not Eligible
P-33-020017		Isolated find - 1 sherd	Prehistoric	Not Eligible
P-33-020020		Isolated find - 1 tobacco tin	Historic	Not Eligible
P-33-020021		Isolated find - 1 bottle	Historic	Not Eligible
P-33-020022		Isolated find - 1 oil can	Historic	Not Eligible
P-33-020023		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020024		Isolated find - 1 tested cobble	Prehistoric	Not Eligible
P-33-020025		Isolated find - 1 hole-in-top can	Historic	Not Eligible
P-33-020026		Isolated find - 1 bottle	Historic	Not Eligible

PRIMARY NUMBER	TRINOMIAL	DESCRIPTION	AGE	NRHP/CRHR ELIGIBILITY RECOMMENDATIONS
Outside Current Project APE				
P-33-019998	CA-RIV-10167	Refuse scatter	Historic	Not Eligible
P-33-020002	CA-RIV-10171	Ceramic scatter	Prehistoric	Not Eligible
P-33-020018		Isolated find - 1 glass jar	Historic	Not Eligible
P-33-020019		Isolated find - 5 sherds (from 2 vessels)	Prehistoric	Not Eligible

*All resources are on private land.

6.2.1 Archaeological Sites and Built Environment

P-33-009186
Type: Refuse Scatter
Time Period: Historic (1942-1943)
Setting: The site area was recently planted in winter wheat.
Elevation: 350 feet (106 meters) AMSL
Nearest Water Source: The Colorado River is nine miles east
Dimensions: 10 by 30 meters (portion within current Project area)
NRHP and CRHR Eligibility Recommendation: Not Eligible

P-33-009186 is a large World War II-era (but probably not DTC-related) refuse dump, deposited in a pit dug by bulldozers, partially burned, and then incompletely buried. The site was originally recorded by Pigniolo, McGinnis, and Dietler (1999), who recommended that the site be evaluated for the NRHP. During their 1999 survey, they observed .50-caliber shell casings, machine gun clips, bottles, food cans, ceramics, and miscellaneous pieces of metal.

In 2002 and 2003, portions of the site were test excavated, including the part of the site north of Riverside Avenue and within the current Project APE. In January 2002, backhoe trenches were excavated by Tierra Environmental to locate subsurface cultural deposits, evaluate integrity, and identify concentrations of material for further investigation. Additionally, four 0.5-by-1.0- meter units were excavated (Reinoehl 2003). Based on the results of the testing, Tierra determined that the site did not retain integrity or have other characteristics that would make it eligible for the NRHP or the CRHR (Reinoehl 2003).

In 2003, Pigniolo excavated five shovel test pits (STPs) next to Riverside Avenue; three just south of the road and two just north of the road (Pignolio 2003). The STPs were 30 cm in diameter and excavated in 10 cm levels. A close (1 to 2 meter) transect survey was conducted and three areas of concern were identified within Pigniolo's survey area. Test pits were excavated in these areas to evaluate subsurface content and integrity of the deposits. The test pits were excavated to depths ranging between 50 to 70 centimeters. However no cultural material was observed more than 40 cm below surface (Pignolio 2003). Evidence obtained from the testing program indicated the cultural material consisted primarily of construction debris scraped from nearby terraces and was the result of numerous deposition episodes. Although the initial survey identified historic military debris, the results of the testing indicate that the site is primarily a deposit of construction-related debris. Pigniolo found the site did not contain diagnostic artifacts and recommended that it was not eligible for listing in the NRHP, presumably under Criterion D (Pigniolo 2003).

The material Pigniolo found in 1999 and 2003 gave no indication of being associated with BAAB's role in 1942 of providing air support to DTC activities (see Section 4.3.5 and 4.3.6 and description of resource P-33-018837). The large amount of building material throughout the site suggested that the refuse was

deposited at this location at the end of military activity at the Blythe Airport and may be the result of demolition and cleanup of the base prior to the transfer of the land to the county (Reinoehl 2003).

In June 2011, archaeologists from POWER revisited the portion of the site falling within the current Project APE and found it to be in fair condition. A large quantity of historic debris included predominantly food cans and miscellaneous metal pieces. The surface material in the current Project area extends 10 feet north of the road and spans 30 meters east/west. A larger portion of the site extends into the power plant property on the south side of Riverside Avenue outside the Project APE; the construction of the road and plant have damaged the site. The depth of the deposit is unknown for most of the site, but the STPs excavated in 2003 indicated that the depth of the deposit on either side of Riverside Avenue is approximately 40 centimeters. There is a wash cutting into the center of the concentration with debris eroding out of the bank showing the deposit to be over one meter deep in that area. Modern debris is also present at the site and the majority of the material appears to have been burned.

The setting is a generally flat, with low rolling dunes, alluvial soils, and desert creosote scrub vegetation. The ground surface visibility was 90 to 100 percent.

The site has been damaged by grading and construction of Riverside Drive and the power plant. Therefore, it does not retain adequate integrity to satisfy Criterion A of the NRHP/Criterion 1 of the CRHR, because it no longer conveys its association with events that have made a significant contribution to the broad patterns of history, or NRHP Criterion B/CRHR Criterion 2, associated with the lives of significant persons. The site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). Because the site is a secondary deposit, the site does not meet the criteria for NRHP Criterion 4/CRHR Criterion D for containing scientific or historical data. Based on the 2011 survey, the site structure and contents appear to be consistent with Pigniolo's (2003) analysis and recommendations. POWER agrees that research potential has been exhausted with Pigniolo's test excavations. The site, already a disturbed secondary deposit, has been further disturbed by continued modern refuse dumping. POWER recommends that P-33-009186 is not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 6. P-33-009186. SITE OVERVIEW, NORTH OF RIVERSIDE AVENUE, FACING EAST

P-33-012532
Type: Transmission Line
Time Period: Historic (1940s-present)
Setting: Cultivated land, developed landscapes, and open desert.
Elevation: 340-360 feet AMSL
Nearest Water Source: Colorado River is 10 miles east
Dimensions: 2.5 miles long and 100 feet wide within the current Project area
NRHP and CRHR Eligibility Recommendation: Not Eligible

Initially recorded in 2000 as the Niland-Blythe 161 kV Transmission Line, this resource consists of a wooden pole, H-frame transmission line running between the Niland substation in Imperial County and the Blythe substation in Riverside County (Dolan 2000). The line was constructed between the 1940s and 1950s and is part of a system of lines carrying power from the Davis and Parker Dams on the Colorado River to 31 substations (Dolan 2000). The resource was re-recorded in 2005 by Wilson, Kwiatkowski, and Eckhardt, who found the line to be in good condition with various upgrades evident on the wooden poles (Carrico and Eckhardt 2005).

A 100-foot portion of the line was revisited in 2008 by Eckhardt who reported the condition of the resource to be the same as in 2005. The transmission line was recommended not eligible to either the NRHP or the CRHR (CEC and WAPA 2000; Eckhardt and Jordan 2008).

In 2011, archaeologists from POWER revisited the 2.5 miles of the line crossing the current Project area. The resource is in good condition and currently in use. The transmission line, oriented northeast to southwest, consists of wooden H-frame poles. The line crosses dune sand and alluvial soils at an elevation of 340 to 360 feet AMSL, passing through citrus groves, cultivated lands, and developed landscapes.

POWER agrees with previous researchers and recommends that P-33-012532, the Niland-Blythe 161 kV Transmission Line, is not eligible for listing in either the NRHP or the CRHR.



FIGURE 7. P-33-012532. NILAND-BLYTHE 161 KV TRANSMISSION LINE

P-33-014083
Type: Transmission Line
Time Period: Historic (1940-present)
Setting: Cultivated land, citrus groves, developed landscapes, and open desert.
Elevation: 340-360 feet AMSL
Nearest Water Source: Colorado River
Dimensions: 1.9 miles long, 125 feet wide within the current Project boundaries
NRHP and CRHR Eligibility Determination: Not Eligible

Placed into service initially in 1943 and modified and completed in 1951, this linear resource, the Parker-Headgate Rock-Blythe 161kV Transmission Line, consists of 777 H-frame structures placed along 64.4 miles (Pigniolo, Baksh, and Dietler 1999). A 0.8-mile segment of the line was recorded in 1999 and recommended not eligible for listing on the NRHP and CRHR (OHP Status Code 6Z) (CEC and WAPA 2000), although the inventory form and report do not mention the reasons for this recommendation.

In 2011, POWER archaeologists updated the existing site record of the 1.9-mile northeast/southwest segment of the transmission that falls within the current Project area. The transmission line is in good condition and is still in use. The segment in the Project area crosses flat, cultivated alfalfa fields and open desert with dune sand, alluvial soils, and creosote bush scrub vegetation

The original evaluation of this resource recommended that the transmission line does not meet the criteria for the CRHR or the NRHP and therefore is ineligible for listing. POWER agrees and recommends that P-33-014083 is not eligible to either the NRHP or the CRHR.



FIGURE 8. P-33-014083. PARKER-HEADGATE ROCK-BLYTHE 161KV TRANSMISSION LINE, FACING NORTHEAST

P-33-018837
Type: Blythe Army Air Base Historic District
Time Period: Historic (1942-1944)
Setting:. Remains of military base surrounded by the current Blythe Airport, modern industrial/commercial properties, and agricultural fields.
Elevation: 390 feet AMSL
Nearest Water Source: The Colorado River is nine miles east; McCoy Wash is two miles northeast
Dimensions: Approximately 1,500 by 1,600 meters, irregularly shaped
NRHP and CRHR Eligibility Recommendation: Contributing elements to the historic district previously recommended eligible to the NRHP

The Blythe Army Air Base Historic District (P-33-018837) was first recorded by KP Environmental in 2010 (Mitchell 2010a, b). The 1942-1944 airfield known as BAAB originally covered 6,372 acres, but Mitchell recorded only an 829-acre portion of the airfield, roughly the eastern portion of the original base (Mitchell 2010a, b). The remaining 5,543 acres within BAAB were not recorded by Mitchell because they fell outside KP Environmental's project area. However, Mitchell (2010a) noted that although she did not survey land at the Blythe Airport, west of her project area, there appeared to be numerous foundations and other remains associated with 1940s military use on the airport (Mitchell 2010a, b). To the east, Mitchell (2010a, b) documented the property only up to what is now the western boundary of the current Project; none of the structures, runways, taxiways, aprons, or features recorded by Mitchell extended into the current APE.

An audit of the airfield was conducted by the Chief of Engineers in 1946. A total of 473 buildings and structures were listed: 164 housing structures; 47 lavatories/latrines; 38 administrative buildings, warehouses, shops and sheds; 16 mess halls; and 11 hospital buildings (Wilson 2008).

POWER updated the P-33-018837 DPR form with an extended boundary and descriptions of additional features identified during the current survey. The updated DPR form documents only the features and artifacts within the current Project APE immediately east of and adjacent to the portion of BAAB documented Mitchell (2010a, b).

BAAB began in 1940 as an emergency landing strip, Flying Field Site 21. In response to the attack on Pearl Harbor, the War Department began to upgrade existing facilities as part of the National Defense Program. In early 1942, improvements began on the Site 21 airstrip to accommodate the largest military aircraft, but the majority of the buildings were not available for use until the end of that year and into 1943. By December 1942, the base had a deep water well, one hanger, an engineering building, 60 barracks, four warehouses, a theater and four paved runways with aprons. The hospital building was completed in 1943 as was a mess hall, barber shop, base chapel and an additional hanger building.

While BAAB was used for World War II training from 1942 through 1944, the base was used for less than a year by the 46th Bombardment Group to provide air support to the army troops under command of General Patton during desert warfare training operations (see Sections 4.3.4 and 4.3.5). In 1942, airfields were under construction for the DTC at Thermal, Rice and Shaver's Summit, When these fields became operational in late 1942, the 46th Bombardment Group relocated and BAAB ceased its support role for the DTC. BAAB came under command of the Second Air Force for training missions by the 34th Bombardment Group and many other groups until it was returned to civil control in 1947.

During the brief period in 1942 when the 46th Bombardment Group and the 3rd Observation Squadron used the field to support the DTC, troops were housed in tents across the highway from the base, planes were parked and serviced in the open, and medical services were performed in a tent. For this reason, the barracks, hospital, and hangers at BAAB are not directly associated with the DTC.

Although the majority of the original structures at BAAB had been reported by others to have been destroyed, Mitchell documented surface artifacts and 133 features within what she defined as the district boundary (Mitchell 2010a, b). The features documented by Mitchell included tank tracks, concrete



FIGURE 9. P-33-018837. BLYTHE ARMY AIR BASE. CONCRETE FOOTINGS FOR HOSPITAL WING



FIGURE 10. P-33-018837. BLYTHE ARMY AIR BASE. REMAINS OF LATRINES AND SHOWERS AT HOSPITAL WING



FIGURE 11. P-33-018837. BLYTHE ARMY AIR BASE. RUBBLE PILE FROM BARRACKS



FIGURE 12. P-33-018837. BLYTHE ARMY AIR BASE. UTILITY SHOP

foundations, rock lined paths and walkways, oiled gravel roads, taxiways and aircraft use areas, one standing shack, one collapsed structure, a livestock corral and associated shelter, a fence line and several piles of bulldozed rubble . The surface artifacts are primarily cans and soda bottles.

As a result of the 2011 survey, POWER identified four distinct areas within the Project APE that contain remnant features of BAAB. These areas include: 1) the hospital area (Figures 9 and 10); 2) the barracks (Figure 11) and adjacent fire station area; 3) the warehouse area; and 4) the utility shop and yard (Figure 12). All of the buildings that once stood in this portion of BAAB have been demolished with the exception of a utility building (Figure 12). Numerous concrete footings and foundation remains, fire hydrants, manholes, walking paths, and oiled roads remain, and subsurface infrastructure (e.g., water and sewer pipes) may also exist. POWER also recorded three clusters of refuse (Clusters 1, 2, and 3) with artifacts associated with life on the base.

- The hospital area consists of foundations, block walls and dirt paths; no standing buildings remain (Figures 9 and 10). The hospital, once a large concrete building with eight wards and hallways connecting several wings, now consists of eight rows of footings and foundations. A concentration of refuse in the hospital area, designated Cluster 2, contains bottles, ceramics, food cans, beer cans, canning jars, ceramic ashtrays, cold cream jars, toothpaste tubes, and mouthwash bottles. The hospital was built in 1943.

- The barracks area (Figure 11) consists of four building foundation pads and a wall footing with a hardstand apron. The barracks were probably built in the latter part of 1942. A fire station once stood next to the barracks area.

- The buildings in the warehouse area were also demolished; the remains include four foundations for several storage facilities and a cold storage. A large refuse deposit, recorded as Cluster 1, in the warehouse area contained glass and ceramic household debris, machinery parts, and oil and gas cans. Warehouses at BAAB were completed by the end of 1942.

- The utility shop (Figure 12) is still standing, but its entire exterior has been modified by the facing of the original wood siding with metal sheeting. The building has a series of 4-over-4 clearstory windows, many of them damaged. The full monitor roof is relatively intact but has also incurred damage. The building has large bay doors. POWER's evaluation of this building finds that while integrity of location is maintained, integrity of design, materials, and workmanship has been lost. Integrity of setting has been diminished by the removal of most other physical features of the military base. The building is currently used as a maintenance and storage facility.

As mentioned in Section 4.3.5, after the United States entered World War II, General Patton was tasked with developing a training center to prepare Army troops for desert combat. To accommodate the troops brought to the region, several existing airfields were taken over by the Army between 1942 and 1944, including Site 21, which was to become BAAB. BAAB was used for a brief period as support for the DTC.

Numerous other resources have been documented within the larger DTC area far outside the Project APE (Bischoff 2000), including airfields and airports. The other airfields associated with the DTC include:

- Shaver's Summit Airport, recommended not eligible to the NRHP .
- Desert Center Army Airfield, recommended not eligible to the NRHP.
- Essex Airfield, recommended eligible to the NRHP.
- Needles Airport, not yet evaluated.
- Rice Field, recommended eligible to the NRHP.
- Thermal Army Airfield, recommended not eligible to the NRHP.

Mitchell (2010a) recommended the Blythe Army Air Base Historic District as eligible for the NRHP under Criterion A and for the CRHR under Criterion 1 for its association with an event that has made a significant contribution to the broad patterns of history, that is, World War II desert training missions. She also recommended the district as eligible under Criterion B for the NRHP and Criterion 2 for the CRHR for its association with the life of a person important to our past, General George S. Patton. However, a formal determination of eligibility was never made (Lloyd, personal communication 2012).

BAAB's association with the DTC lasted less than a year, and its association with General Patton was even briefer. The barracks, warehouses, fire station, utility building, and hospital within the Project APE were for the most part built and used after BAAB's ties to the DTC and General Patton ended. Nonetheless, BAAB's support for desert training missions continued until 1944. POWER agrees the Blythe Army Air Base Historic District (P-33-018837), including the portion with the APE, is associated with events that have made a significant impact on broad patterns of history (NRHP Criterion A/CRHR Criterion 1). While BAAB as a whole has ties to General Patton and therefore with the life of a significant person (NRHP Criterion B/CRHR Criterion 2), Patton's association with the portion of BAAB in the Project APE is less direct. The only standing structure within the APE is the utility shop, which has retained very little integrity. It is not recommended eligible under NRHP Criterion C/CRHR Criterion 3. Finally, given the temporary nature of much of the original construction, the demolition of the buildings, the extensive archival documentation of BAAB, and the types of likely subsurface features (i.e., sewer and water lines), the portion of BAAB within the Project APE has little potential for significant archaeological information. Therefore, this portion of the resource is recommended not eligible under NRHP Criterion D/CRHR Criterion 4.

After several discussions and site visits with the Riverside County Archaeologist, POWER recommends that despite the limited physical integrity of the features within the Project APE, the portion of BAAB falling within the current Project boundaries contain contributing elements and are, like the historic district, recommended eligible to the NRHP and CRHR. POWER also recommends that the proposed district boundaries be expanded to include the components identified within the Project APE.

P-33-019996 (CA-RIV-10165)
Type: Refuse Scatter
Time Period: Historic
Setting: Agricultural field
Elevation: 391 feet (119 meters) AMSL
Nearest Water Source: There is a seasonal wash 1.5 miles to the south and the Colorado River is 10 miles to the east.
Dimensions: 66 by 42 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

This site consists of a sparse scatter of historic debris covering approximately 0.25 acre (Figure 14). There are no artifact concentrations; rather, all are spread evenly across the surface. Approximately 100 artifacts were counted, including six intact glass bottles and jars, seven glass bottle and jar bases, fragments of glass in a variety of colors, three hole-in-top cans, a crushed oil can and other metal debris, a flag holder, and a porcelain doll leg (Figures 15 and 16). The maker's marks on several of the bottles indicate they were produced between the 1930s and the early 1960s. A K's Fruit Beverage soda bottle dates to 1950 (Toulouse 1971).

The topography is generally flat with low rolling dunes. The site is on land recently cultivated and the dunes are vegetated with creosote bushes and low-growing xeric grasses. The ground visibility was 90 to 100 percent. The site condition is poor due to agricultural activity.

P-33-019996 contains general household refuse dating to the mid-20th century. The refuse appears to be secondary deposition from multiple sources and episodes over a 30-year period. The artifacts do not appear to be related to a specific location or activity.

There is no evidence this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). This site and the artifacts are typical of refuse disposal sites common to the area. There is no archaeological evidence (e.g., buried deposits) to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-019996 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 13. P-33-019996. SITE OVERVIEW, FACING SOUTH



FIGURE 14. P-33-019996. K'S FRUIT BEVERAGE BOTTLE



FIGURE 15. P-33-019996. COCA-COLA BOTTLE BASE, "LOS ANGELES, CALIF"

P-33-019997 (CA-RIV-10166)
Type: Refuse Scatter
Time Period: Historic (post-1945)
Setting: Agricultural field
Elevation: 373 feet (113 meters) AMSL
Nearest Water Source: There is a seasonal wash 0.2 mile to the south and the Colorado River is 10 miles to the east.
Dimensions: 50 by 10 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

The site consists of two concentrations of historic debris, primarily cans and glass (Figure 17). Concentration 1 contains 15 cans and one bottle in a 5-by-5-meter area. Concentration 2 covers a 10-by-5-meter area 15 to 20 meters north of Concentration 1. Concentration 2 contains numerous sanitary cans, bottle bases, a "Velvet" tobacco tin (Figure 18), a plastic key chain with a Mobil Oil logo and "1958" printed on it (Figure 19), and metal debris. Based on the presence of jars or bottles with diagnostic

maker's marks (Toulouse 1971) and the keychain, the age of the site likely falls between the late 1950s and late 1960s.

The site is in an agricultural field covered in aeolian sands and sparsely vegetated with low-growing grasses, creosote, chamise, and Palo Verde trees. The topography is generally flat with low rolling dunes. The ground surface visibility was 90 to 100 percent. The condition of the site is poor as the artifacts have been disturbed by disking and other agricultural activities.

P-33-019997 contains general household refuse from the mid-to-late 20th century. There is no evidence to suggest that this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). P-33-019997 is typical of refuse disposal sites common to the area. There is no archaeological evidence (e.g., buried deposits) to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-019997 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 16. P-33-019997. SITE OVERVIEW, FACING SOUTH



FIGURE 17. P-33-019997. VELVET TOBACCO TIN



FIGURE 18. P-33-019997. MOBIL OIL COMPANY KEY CHAIN, 1958

P-33-019998 (CA-RIV-10167)
Type: Refuse Scatter
Time Period: Historic
Setting: Agricultural field
Elevation: 391 feet (119 meters) AMSL
Nearest Water Source: There is a seasonal wash 0.2 mile to the northeast and the Colorado River is 10 miles to the east.
Dimensions: 77 by 70 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

Because of modifications to the Project boundaries after completion of the cultural resource survey, P-33-019998 no longer falls within the Project APE.

P-33-019998 consists of a dense scatter of historic refuse mixed with modern trash (Figure 20). Approximately 100 domestic and other artifacts were seen, including hole-in-top cans, sanitary cans, juice cans, porcelain fragments (Figure 21), clear glass bottles, and canning jars manufactured from 1937 to 1977 (Whitten n.d.).

The site condition is poor; it has been affected by past agricultural activity and recent dumping. The topography is generally flat with low, rolling dunes vegetated with creosote bushes and low-growing xeric grasses. The ground surface visibility was 90 to 100 percent.

P-33-019998 contains household refuse dating from the 1930s to the1970s, likely the result of numerous depositional episodes. The site consists of secondary deposits that lack evidence this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). This site and the materials found are typical of refuse disposal sites common to the area. There is no archaeological evidence to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-019998 is recommended not eligible for inclusion in either the NRHP or the CRHR.

P-33-019999 (CA-RIV-10168)
Type: Refuse Scatter
Time Period: Historic
Setting: Agricultural field
Elevation: 392 feet (119 meters) AMSL
Nearest Water Source: There is a seasonal wash 1.2 miles to the south and the Colorado River is 10 miles to the east.
Dimensions: 67 by 58 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

P-33-019999 is a scatter of historic refuse with modern trash mixed in (Figure 22). More than 100 artifacts were seen, including whiteware (Figure 23) dating to the early 1940s (Kovel and Kovel 1986), hobbleskirt Coca-Cola bottles produced between 1916 and 1957 (Bates 2011), sanitary cans, and porcelain.



FIGURE 19. P-33-019998. SITE OVERVIEW, FACING SOUTH-SOUTHWEST

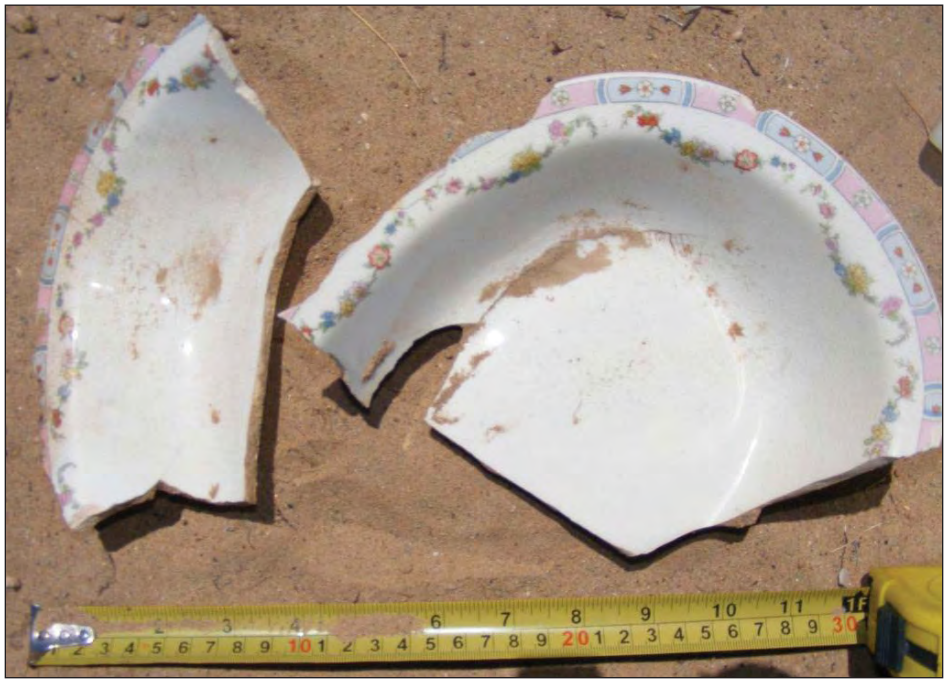


FIGURE 20. P-33-019998. BOWL FRAGMENTS

The topography is generally flat with low, rolling dunes vegetated with creosote bushes and low-growing xeric grasses. The ground visibility was 90 to 100 percent. The site condition is poor; it has been affected by past agricultural activities, recent dumping and construction of concrete pads and poles.

Although the artifacts at the site date to the mid-20th century, there is no evidence to suggest this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP

Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). This type of site and the material within it are typical of refuse disposals common to the area. There is no archaeological evidence to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-019999 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 21. P-33-019999. SITE OVERVIEW WITH PUSH PILE, FACING SOUTHEAST



FIGURE 22. P-33-019999. WHITEWARE DISH WITH HOMER LAUGHLIN MAKER'S MARK, JANUARY 1943

P-33-020000 (CA-RIV-10169)
Type: Historic Refuse Scatter
Time Period: Historic (1950s-1960s)
Setting: Agricultural field
Elevation: 392 feet (119 meters) AMSL
Nearest Water Source: McCoy Wash is three miles northeast and the Colorado River is ten miles east
Dimensions: 36 by 70 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

P-33-020000 (Figure 23) is a sparse historic refuse scatter mixed with modern debris. The artifacts include church-key opened sanitary and combination cans manufactured between 1952 and 1960 (Goodman 2002), aluminum pull-top cans dating to the early 1960s (Goodman 2002), clear and brown glass fragments, and clear glass soda bottles.

The site is in an area recently planted in winter wheat; the surrounding area is generally flat with low, rolling dunes. The vegetation consists primarily of creosote bushes and low-growing xeric grasses. The ground surface visibility was 90 to 100 percent.

The artifacts at P-33-020000 cannot be linked to events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). This material found at the site is typical of refuse disposal sites common to the area. There is no archaeological evidence to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-020000 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 23. P-33-020000. SITE OVERVIEW, FACING SOUTH

P-33-020001 (CA-RIV-10170
Type: Ceramic Scatter
Time Period: Prehistoric
Setting: Agricultural field
Elevation: 390 feet (118 meters) AMSL
Nearest Water Source: There is a seasonal wash 0.6 mile to the northeast and the Colorado River is 10 miles to the east.
Dimensions: 17 by 17 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

P-33-020001 (Figure 24) consists of 16 ceramic vessel fragments, most resembling Lower Colorado Buffware (Society for California Archaeology 2011). Several of the sherds have a gray exterior with dark gray/black interior (Figure 25), but most are tan. Two of the tan sherds also have a possible white decoration (Figure 26). White designs have been found on Lower Colorado Buffware pottery from other sites (Simon n.d.). The sherds range in size from 3-by-1 centimeters to 6-by-5 centimeters. Thickness is 5 to 6 millimeters. The temper is large-grained with flecks of mica. There are no rim or base sherds in the assemblage. The age range for Lower Colorado Buffware is A.D. 1500 to post-1800 (Waters 1982; Seymour and Lawrence 1997).

The site is in an agricultural field. The topography is generally flat with low, rolling dunes vegetated with creosote bushes and low-growing xeric grasses. Disturbances to the site are from agricultural activity.

Because P-33-020001 contained only 16 prehistoric sherds on the surface of a plowed field, no evidence suggests this site is associated with events that have made a significant impact on the broad patterns of history (NRHP Criterion A/CRHR Criterion 1) or that this site is associated with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The limited number and range of artifacts and the level of agricultural disturbance suggests that the site has little potential to provide additional scientific information (NRHP Criterion D/CRHR Criterion 4).

Therefore, P-33-020001 is recommended not eligible to either the NRHP or the CRHR.



FIGURE 24. P-33-020001. SITE OVERVIEW, FACING SOUTH



FIGURE 25. P-33-020001. GRAY SHERD



FIGURE 26. P-33-020001. LOWER COLORADO BUFFWARE SHERDS

P-33-020002 (CA-RIV-10171)
Type: Ceramic Scatter
Time Period: Prehistoric
Setting: Agricultural field
Elevation: 390 feet (118 meters) AMSL
Nearest Water Source: There is a seasonal wash 0.2 mile to the south and the Colorado River is 10 miles to the east.
Dimensions: 17 by 17 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

Because of modifications to the Project boundaries after completion of the archaeological survey, P-33-020002 no longer falls within the Project APE.

P-33-020002 consists of eight ceramic sherds of Lower Colorado Buffware (Society for California Archaeology 2011) and three small weathered fragments of indeterminate shell. The exterior of each sherd is rough with accretions; the interior has a smooth finish (Figures 27 and 28). The sherds have a fine paste with a silica temper. The age range for Lower Colorado Buffware is A.D. 1500 to post-1800 (Waters 1982; Seymour and Lawrence 1997).

The site is in a desert landscape of rolling sand dunes of moderate to fine sand. Vegetation includes creosote and desert grasses; the ground surface visibility was 90 to 100 percent.

No evidence suggests that P-33-020002 is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1) or that this site is associated with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The site consists of very little cultural material that has been disturbed by long-term agriculture, limiting its information potential (NRHP Criterion D/CRHR Criterion 4).

P-33-020002 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 27. P-33-020002. SHERD, EXTERIOR SURFACE



FIGURE 28. P-33-020002. SHERD, INTERIOR SURFACE

6.2.1 Isolated Finds

For this report, isolated finds are defined as three or fewer prehistoric artifacts of the same type or five or fewer historic artifacts.

During the current survey, POWER identified 24 isolated finds within the Project APE, including 17 historic and 6 prehistoric isolated finds, and one isolated find with both prehistoric and historic artifacts. The 17 historic isolated finds are primarily hole-in-top cans; several bottle fragments were also documented. Four of the prehistoric isolated finds are ceramic sherds and one is a hammerstone and one is a tested cobble. One isolated find included a prehistoric sherd and a hole-in-top can. Most of the isolated ceramic fragments were brown with no decoration. Although prehistoric isolated finds have been found in association to Native American trails, no trails were identified within the current Project area. Isolated finds are not considered either historic properties under NHPA or historical resources under CEQA.

P-33-020003
This isolated find is a complete aqua glass, six ounce hobbleskirt Coca-Cola bottle embossed with "LOS ANGELES, CALIF." on the base. This particular bottle type was produced between 1916 and 1957 (Bates 2011). P-33-020003 is in open desert with low rolling sand dunes and creosote bush; the ground surface visibility was 90 percent.

P-33-020004
This isolated find is a single hole-in-top can measuring 4¼ inches tall by 3 inches in diameter. Production of hole-in-top cans began in 1900 and they are still used for condensed milk today (Rock 1984). P-33-020004 is in open desert with low rolling sand dunes and creosote bushes; the ground surface visibility was 90 percent.

P-33-020005
The isolated find consists of one hole-in-top evaporated milk can measuring 3⅞ inches by 2⅞ inches with a knife opening. Production of hole-in-top cans began in 1900 and they are still used for condensed milk (Rock 1984:100). The can is in an agricultural field covered in aeolian sands and vegetated with creosote, chamise, and Palo Verde trees. The ground surface visibility was 90 percent.

P-33-020006
Isolated find P-33-020006 is one hole-in-top can measuring $2^{9}/_{16}$ inches by 3 inches. Production of hole-in-top cans began in 1900 and they are used for condensed milk today (Rock 1984). This isolated find is

in an agricultural field covered in aeolian sand and vegetated with creosote bushes and Palo Verde trees; the ground surface visibility was 90 percent.

P-33-020007
Isolated find P-33-020007 is a knife-opened hole-in-top can measuring 3 inches in diameter by 4 inches high. Production of hole-in-top cans began in 1900 and they are still used for condensed milk (Rock 1984). This isolated find was found close to a road in a parcel of open land. The area is vegetated with low-growing grasses and native desert shrubs, including creosote. Winter wheat was planted in this area in 2011, and there are cultivated fields on the other side of the road to the east. Modern litter and evidence of plowing or grading is visible throughout the area. The ground surface visibility was 90 to 100 percent.

P-33-020008
This isolated find consists of five cans: three hole-in-top cans, each measuring 2⅞ inches in diameter by 4 inches high, and two very deteriorated sanitary cans. Production of hole-in-top cans began in 1900 and they are still used for condensed milk (Rock 1984). Found near the road in a parcel of open land, the cans are crushed and deteriorating. Winter wheat was planted in this area in 2011. Uncultivated fields and alfalfa fields are on the other side of the road to the east. The area is vegetated with low-growing grasses and native desert shrubs, including creosote; the ground surface visibility was 90 to100 percent.

P-33-020009
Isolated find P-33-020009 is a partial amber glass bottle base with stippling and "Durag…" embossed on the fragment. "Duraglas" was the proprietary name for a process used by the Owens-Illinois Glass Company that began in 1940 and continued until the mid 1950s (Toulouse 1971). The bottle fragment is in an agricultural field; the ground visibility was poor due to dense vegetation.

P-33-020010
Isolated find P-33-020010 consists of a hole-in-cap can measuring 3 by 4⅜ inches, a hole-in-cap can measuring 4⅛ by 4⅞ inches, a rectangular, single- seam meat or tobacco tin measuring 2⅜ inches by 1⅜ by 3¼ inches, and two small aqua glass fragments. All five artifacts were found in a 3.3 by 2.5 meter area. The isolated find is in an agricultural field with 100 percent ground surface visibility. Production of hole-in-cap cans began as early as 1820 and lasted up until 1930 (Rock 1984).

P-33-020011
Isolated find P-33-020011 consists of one hole-in-top can measuring 3 by3⅞ inches, one circular tin measuring $3\frac{5}{16}$ by 1½ inch with a maker's mark of a diamond with a "C" in the center, and one canning jar lid. Production of hole-in-top cans began in 1900 and they are still used for condensed milk (Rock 1984). The isolated find is in an agricultural field with 100 percent ground surface visibility.

P-33-020012
Isolated find P-33-020012 consists of two hole-in-top cans, both crushed, and one tobacco tin. Production of hole-in-top cans began in 1900 (Rock 1984). The isolated find is in an agricultural field with 100 percent ground surface visibility.

P-33-020013
Isolated find P-33-020013 consists of two artifacts: one Late Prehistoric buffware sherd measuring 4 by 3 centimeters with a thickness of 4 millimeters, and one hole-in-top can. Production of hole-in-top cans began in 1900 (Rock 1984) The isolated find is in an agricultural field with 100 percent ground surface visibility.

P-33-020014
Isolated find P-33-020014 consists of two prehistoric ceramic sherds; one measuring 3 by 6 centimeters and 4 millimeters thick, the other measuring 2 by 2 centimeters and 4 millimeters thick. Both are an

untyped brown ware, with chunky large-grained temper, a tan exterior, a reddish interior and fire clouding on both surfaces. The isolated find is near a seasonal drainage in an agricultural field with 100 percent ground surface visibility.

P-33-020015
P-33-020015 is a quartz hammerstone with crushing or pecking on both ends. The isolated find is near a seasonal drainage in an agricultural field with 100 percent ground surface visibility.

P-33-020016
Isolated find P-33-020016 is an untyped brownware sherd with fire clouding on the exterior surface. The sherd measures 8 by 4 centimeters and four millimeters thick. The isolated find is near a seasonal drainage in an agricultural field with 100 percent ground surface visibility.

P-33-020017
Isolated find P-33-020017 consists of an untyped brown ware prehistoric sherd measuring 5 by 3 centimeters and four millimeters thick. This isolated find is near a seasonal drainage in an agricultural field with 100 percent ground surface visibility.

P-33-020018
Isolated find P-33-020018 is a complete Mason jar with a Hazel-Atlas maker's mark, manufactured at the Ada, Oklahoma plant between 1931 and 1964 (Toulouse 1971). The isolated find is in a desert landscape consisting of rolling sand dunes, creosote and chamise. The ground surface visibility was 90 to 100 percent. Because of modifications to the Project after completion of the cultural resource survey, isolated find P-33-020018 no longer falls within the Project boundaries.

P-33-020019
Isolated find P-33-020019 consists of five separate prehistoric ceramic sherds that fit together to make two individual vessel fragments. They are both rim sherds, one 8.0 by 6.9 centimeters and the other 7.0 by 5.3 centimeters. The sherds have a reddish interior and a gray exterior. The paste ranged from a fine to course paste, and some silica was seen in cross-section. This isolated find is in a desert landscape of rolling sand dunes, creosote and chamise. The ground surface visibility was 90 to 100 percent. Because of modifications to the Project after completion of the cultural resource survey, isolated find P-33-020019 no longer falls within the Project boundaries.

P-33-020020
Isolated find P-33-020020 is a single tobacco tin, very weathered with a minimal amount of the red label remaining. The label possibly reads "Velvet." It is in an agricultural field with 100 percent ground surface visibility.

P-33-020021
Isolated find P-33-020021 is a complete Coca-Cola bottle measuring 7¾ by $2\frac{5}{16}$ inches with a one inch mouth. Embossed on the base is "BLYTHE CALIF," and on one side the bottle reads "Coca-Cola" written in script and "Trade Mark Register bottle Pat 0 105529." On the opposite side shows "Coca-Cola" written in script and "Trade Mark Registered Min. Contents 6 Fl ozs." The hobbleskirt bottle of this size and with embossing dates from 1916 to 1957 (Bates 2011). The isolated find is in an agricultural field planted in winter wheat in 2011. The ground surface visibility was 100 percent.

P-33-020022
Isolated find P-33-020022 is a spool-opened oil can measuring $5\frac{9}{16}$ by 4⅞ inches, with a "Piton" maker's mark stamped on the base. The isolated find is in an agricultural field that was planted in winter wheat in 2011. The site area had 100 percent ground surface visibility.

P-33-020023
Isolated find P-33-020023 is a single hole-in-top can measuring $4^{7}/_{16}$ by $3^{1}/_{16}$ inches, knife-opened and in very poor condition. Production of hole-in-top cans began in 1900 and they are still used for condensed milk today (Rock 1984). This isolated find is in an agricultural field planted in winter wheat in 2011. The field had 100 percent ground surface visibility.

P-33-020024
Isolated find P-33-020024 is a tested cobble with one flake scar on both the dorsal and ventral sides. This prehistoric isolated find is in an agricultural field that had been planted in winter wheat in 2011. Ground surface visibility was 100 percent.

P-33-020025
Isolated find P-33-020025 consists of one hole-in-top can measuring $2^{3}/_{16}$ by 2½ inches. Production of hole-in-top cans began in 1900 and they are still used for condensed milk today (Rock 1984). This isolated find is in an agricultural field planted in winter wheat in 2011. The field had 100 percent ground surface visibility.

P-33-020026
Isolated find P-33-020026 is a liquor bottle measuring $11^{15}/_{16}$ by 3⅝ inches, with a paper label and an Owens-Illinois Duraglas maker's mark on the base. The bottle was produced by Plant 9 in Streator, Illinois in 1930 (Toulouse 1971). The isolated find is in an agricultural field planted in winter wheat in 2011. The field had 100 percent ground surface visibility.

6.3 Native American Coordination

As discussed in Section 5.3, *Native American Communication*, POWER contacted the NAHC requesting information regarding Native American groups with historic ties to, and interest in, the proposed Project area. In May 2011, POWER sent letters to 20 tribes identified by the NAHC (see Table 4 and Appendix A) requesting information concerning Native America cultural resources in the Project area. Responses were received from the Aqua Caliente Band of Cahuilla Indians Tribal Historic Preservation Officer (THPO) and the Augustine Band of Cahuilla Indians. The Aqua Caliente Band THPO requested the name of the consultant conducting cultural resource investigations and additional information (phone message dated May 12, 2011). Later, the Aqua Caliente Band requested Native American monitoring during field survey and construction (letter dated June 12, 2011). However, by the time the letter was received by POWER, the field survey had been completed.

The Augustine Band of Cahuilla Indians submitted a letter on May 17, 2011 indicating they were unaware of specific cultural resources that may be affected by the Project and encouraging contact with Native American Tribes and individuals in the immediate vicinity of the Project site, contracting with a qualified construction monitor, and notifying the Augustine Band should cultural resources be discovered during the development of the Project.

In November 2011, a CEQA Notice of Preparation (NOP) of an EIR was sent via certified mail to 22 Native American Tribes (see Section 5.3). The NOP described the proposed Project and location, environmental review process, potential environmental effects, and contact information, and announced the time and location of the public scoping meeting.

In April 2012, 22 Native American Tribes were sent invitations to an informational meeting. This was an informal meeting hosted by the Applicants, which the BLM and County attended; however, the informational meeting was not part of the BLM government-to-government consultation. Representatives of the Colorado River Indian Tribes, the Augustine Band of Cahuilla Indians, the Agua Caliente Band of Cahuilla Indians, and the Mohave Elders Management attended. Information was presented to them about

the Project and about the results of the cultural resource investigations, and the representatives asked questions and expressed concerns.

Tribal consultation required under Section 106 is being performed by the BLM on a government-to-government basis; this consultation has begun and is ongoing.

7.0 IMPACTS/EFFECTS

This section addresses impacts to cultural resources under CEQA and NEPA; however, the process for assessing effects to historic properties under Section 106 of the NHPA is described briefly in Section 7.1. The site-specific effects will be identified in the joint Environmental Impact Report/Environmental Assessment (EIR/EA) prepared in compliance with CEQA and NEPA.

7.1 Effects Under the National Historic Preservation Act

Under Section 106 of the NHPA, adverse effects to a historic property (i.e., a cultural resource eligible for or listed in the NRHP) can include physical demolition, destruction, relocation, or alteration of the property or its immediate surroundings such that the integrity of the property's location, design, setting, materials, workmanship, feeling, or association would be materially impaired or diminished.

Whenever a historic property cannot be avoided by project activities, adverse effects must be resolved through development of either a Memorandum of Agreement or Programmatic Agreement in consultation with the various consulting parties.

Section 106 regulation states that the regulatory definition of "effect," pursuant to 36 CFR 800.16 (i) is that the term means "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP." In practice, a direct effect under Section 106 is that which is a "direct physical disturbance of a historic property." Effects that are immediate but not physical in character, such as visual intrusion, and reasonably foreseeable effects that may occur at some point subsequent to the implementation of the proposed undertaking are referred to as "indirect effects."

Direct effects on historic properties in the Project area could result from ground disturbing activities associated with the construction of the solar generation and transmission facilities, such as clearing vegetation, grading roads, installing underground infrastructure, installing tower foundations, and driving supports for solar arrays.

Historic properties can also be subject to indirect effects, such as changes in public access that increase the potential for vandalism.

7.1.1 Assessment of Effects

A total of 31 archaeological and built resources have been identified in the APE, including a portion of Blythe Army Air Base (BAAB) (archaeological resources and one standing building), six other archaeological sites, two transmission lines, and 22 isolated finds. Only one resource—P-33-018837, BAAB—has been previously recommended eligible to the NHRP as the Blythe Army Air Base Historic District. The original boundaries of this resource have been expanded to include the portion within the BMSP APE. As such, this would be the only resource potentially adversely affected by the proposed undertaking.

P-33-018837 would extend into the proposed solar facility site. The principal components of the portion of BAAB within the BMSP APE include:

- **Hospital Area.** The hospital area consists of foundations, block walls, and dirt paths; no standing buildings remain, and there is a concentration of refuse in the hospital area. The hospital was built in 1943.
- **Barracks and Fire Station Area.** The barracks area consists of four building foundation pads and a wall footing with a hardstand apron. The barracks were probably built in the latter part of 1942. A fire station once stood next to the barracks.

- **Warehouse Area.** The warehouse area consists of foundations for several storage facilities and a cold storage and a large refuse deposit. Warehouses at BAAB were completed by the end of 1942.
- **Utility Shop and Yard.** The utility shop is still standing, but its entire exterior has been modified. POWER's evaluation of this building finds that while integrity of location is maintained, integrity of design, materials, and workmanship has been lost. Integrity of setting has been diminished by the removal of most other physical features of the military base.

Each of these components would be in areas of proposed PV panel blocks and access roads, although a small portion of the hospital area near Buck Boulevard would fall outside.

The Project would utilize silicon PV panels configured into trackers, and the trackers configured into blocks. Each block would be made up of six trackers and would be 295 feet long and 140 feet wide. The panels would be supported by micro-piles that would be driven directly into the ground to a depth of 8 to 12 feet using vibration technology. A tracked backhoe would drive piles. Concrete foundations for the drive motors (device used to move drive strut back and forth) would be poured in place, and electrical equipment for the array would be set in place. No blasting or rock breaking is anticipated or proposed. Small truck-mounted cranes or grade-all forklifts would place trackers on support piles.

Within the solar facility, 12-foot-wide dirt access roads would be constructed every 200 to 400 feet to allow access and maintenance of the solar panels.

7.2 Impacts Under the California Environmental Quality Act

Under CEQA, a project is considered to have an impact on the environment if it alters any characteristics of a historical resource that qualify the it for inclusion in the CRHR. Furthermore, it is stated in CEQA that the lead agency may require that reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. CEQA also requires that impacts as defined by PRC 21083.2 must be addressed and mitigated as outlined in PRC 15126.4 and 15331.

Under CEQA, a checklist provides a common set of guidelines that set forth the significance criteria generally applied to cultural resources within the state. The checklist provides questions to be addressed using the following criteria:

- Potentially significant impact
- Less than significant impact with mitigation
- Less than significant impact
- No impact

Three questions pertaining to cultural resources are presented below.

A) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

B) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

C) Would the project disturb any human remains, including those interred outside of formal cemeteries?

7.2.1 Assessment of Impacts

A total of 31 cultural resources have been identified in the APE, including a portion of BAAB (archaeological resources and one standing building), six other archaeological sites, two transmission lines, and 22 isolated finds. In addition, two archaeological sites and two isolated finds were identified in an area that was later excluded from the APE.

Table 8 summarizes the anticipated impacts on nine cultural resources within the Project area. Isolated finds are not included in Table 8 because none of them are eligible to the CRHR. Under CEQA, impacts would occur only to historical resources (those eligible to the CRHR), unique archaeological resources (none of which have been identified in the Project area), or human remains (none of which have been identified in the Project area). Only one resource—P-33-018837, a portion of BAAB—is recommended eligible to the CRHR. As such, this would be the only resource potentially impacted by the proposed Project.

All nine cultural resources were recorded within the proposed solar field; none were found along the proposed transmission line.

Table 8. Impacts on Cultural Resources

PRIMARY NUMBER	TRINOMIAL	NRHP/CRHR ELIGIBILITY RECOMMENDATION	JURISDICTION	PROJECT COMPONENT	IMPACTS
P-33-009186	CA_RIV-6370	Not Eligible	Private	Solar Field	No Impact
P-33-012532	CA_RIV-7127	Not Eligible	Private	Solar Field	No Impact
P-33-014083	--	Not Eligible	Private	Solar Field	No Impact
P-33-018837	--	Eligible	Private	Solar Field	Impact
P-33-019996	CA-RIV-10165	Not Eligible	Private	Solar Field	No Impact
P-33-019997	CA-RIV-10166	Not Eligible	Private	Solar Field	No Impact
P-33-019999	CA-RIV-10168	Not Eligible	Private	Solar Field	No Impact
P-33-020000	CA-RIV-10169	Not Eligible	Private	Solar Field	No Impact
P-33-020001	CA-RIV-10170	Not Eligible	Private	Solar Field	No Impact

7.2.2 Application of CEQA Significance Thresholds

A) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

One historical resource, the Blythe Army Air Base (P-33-018837), has been identified as within the Project APE.

Based on the proposed Project site plan, several of the elements of P-33-018837 would be physically removed or altered during Project construction, whereas other elements could be avoided. Cultural resource management recommendations, described in the next section, have been developed in consultation with the Applicants and the Riverside County Archaeologist and Historic Preservation Officer to mitigate the impact from significant to less than significant.

B) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

None of the archaeological sites recorded in the Project area qualify as unique archaeological resources.

C) Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains have been previously recorded or discovered during surveys for this Project and, as such, no impacts to this type of resource are anticipated; however, should human remains be discovered on private land at any time during implementation of the Project, construction in the vicinity will halt and the coroner will be contacted immediately (PRC 7050.5). If the coroner determines that the remains do not require an assessment of cause of death and are probably Native American, then the NAHC will be contacted to identify the most likely descendents. Other steps should be implemented according to the requirements of PRC 5097.98.

8.0 RECOMMENDATIONS

Specific cultural resource management recommendations for the expanded P-33-018837 have been developed in consultation with the Applicants and the County Archaeologist. These were developed as part of the CEQA process; mitigation measures to comply with Section 106 of the NHPA and with NEPA will be developed by the BLM and included in the environmental document.

These management recommendations are defined in the Conditions of Approval and pertain to the portion of the Project area that includes privately owned land. The Conditions of Approval specify the following:

- Archaeological monitoring shall be conducted by a qualified county-approved Archaeologist who shall manage and oversee archaeological monitoring of all initial ground disturbing activities and excavations of each portion of the Project site.
- A Special Interest Monitor designated by the General Patton Memorial Museum in Chiriaco Summit, California shall be allowed on-site during all initial ground disturbing activities and excavation of the parcels within the Project site that contain BAAB-related features and artifacts.
- A Tribal Observer designated by the Agua Caliente Band of Cahuilla Indians or other designated Tribal representative shall be allowed on-site when the Project Archaeologist is present during all initial ground disturbing activities and excavations for each portion of the Project site.
- A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be submitted to the County Archaeologist and the County Historic Preservation Officer (CHPO). The CRMMP shall address the details of all activities that must be completed in order to reduce the impacts to cultural and historical resources to a level that is less than significant. The CRMMP shall define the roles and responsibilities of cultural resource personnel and provides the timelines for the completion of the required mitigation.

During Project construction, if human remains are encountered on private land, the provisions of State Health and Safety Code Section 7050.5 will apply. This code section states that no further disturbance shall occur until the Riverside County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be Native American in origin, the County Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner and his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC and granting of landowner permission. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

If human remains are discovered on BLM land, NAGPRA (25 U.S.C. 3001) provides a process for federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants and culturally affiliated Indian tribes. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional excavation and unanticipated discovery of Native American cultural items on federal lands, and penalties for noncompliance and illegal trafficking. The Secretary of the Interior's implementing regulations are at 43 CFR part 10.

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APPENDIX A: NATIVE AMERICAN COORDINATION

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Table A-1. Communication with Native American Representatives

AFFILIATION	CONTACT	COMMUNICATIONS
Fort Mojave Indian Tribe (Mojave)	Mr. Tim Williams, Chairperson	5/2/11 POWER sent certified letter and email with map of Project area
Ramona Band of Cahuilla Mission Indians (Cahuilla)	Joseph Hamilton, Chairman	5/2/11 POWER sent certified letter and email with map of Project area
Twentynine Palms Band of Mission Indians (Chemehuevi)	Darrell Mike, Chairperson	5/2/11 POWER sent certified letter and email with map of Project area
Chemehuevi	Joseph R. Benitez (Mike)	5/2/11 POWER sent certified letter and email with map of Project area
Chemehuevi Reservation	Charles Wood, Chairperson	5/2/11 POWER sent certified letter and email with map of Project area
Colorado River Indian Tribe (Mojave, Chemehuevi)	Ginger Scott, Museum Curator; George Ray, Coordinator	5/2/11 POWER sent certified letter and email with map of Project area
Fort Yuma Quechan Indian Nation (Quechan)	Michael Jackson, President	5/2/11 POWER sent certified letter and email with map of Project area
AhaMaKav Cultural Society, Fort Mojave Indian Tribe	Linda Otero, Director	5/2/11 POWER sent certified letter and email with map of Project area
Santa Rosa Band of Mission Indians (Cahuilla)	Mayme Estrada, Chairwoman	5/2/11 POWER sent certified letter and email with map of Project area
Augustine Band of Cahuilla Mission Indians (Cahuilla)	Mary Ann Green, Chairperson	5/2/11 POWER sent certified letter and email with map of Project area **Response:** 5/25/11-received response letter from Mary Ann Green. No action requested.
Morongo Band of Mission Indians (Cahuilla, Serrano)	Michael Contreras, Cultural Heritage Program	5/2/11 POWER sent certified letter and email with map of Project area
San Manuel Band of Mission Indians(Serrano)	Ann Brierty, Policy/Cultural Resources Department	5/2/11 POWER sent certified letter and email with map of Project area
Torres-Martinez Desert Cahuilla Indians (Cahuilla)	Diana L. Chihuahua, Vice Chairperson, Cultural	5/2/11 POWER sent certified letter and email with map of Project area
Fort Mojave Indian Tribe (Mojave)	Nora McDowell, Cultural Resources Coordinator	5/2/11 POWER sent certified letter and email with map of Project area
Cocopah Museum/Cultural Resources Department (Cocopah)	Jill McCormick, Tribal Archaeologist	5/2/11 POWER sent certified letter and email with map of Project area
Agua Caliente Band of Cahuilla Indians	Patricia Tuck, THPO	5/2/11 POWER sent certified letter and email with map of Project area **Response:** 5/12/11- Telephone message from P. Tuck requesting name of arch. firm contracted to survey and a copy of the records search results.

AFFILIATION	CONTACT	COMMUNICATIONS
		6/22/11- Letter received from P. Tuck requesting copies of cultural resource reports generated for review and comment; an approved monitor to be present during survey and/or ground disturbance; the coroner must be contacted if human remains are found.
Augustine Band of Cahuilla Mission Indians (Cahuilla)	Karen Kupcha	5/2/11 POWER sent certified letter and email with map of Project area
Quechan Indian Nation	Bridget Nash-Chrabascz, THPO	5/2/11 POWER sent certified letter and email with map of Project area
Ah-Mut-Pipa Foundation (Quechan Kumeyaay)	Preston J. Arrow-weed	5/2/11 POWER sent certified letter and email with map of Project area
Cahuilla Band of Indians	Luther Salgado, Sr., Chairperson	5/2/11 POWER sent certified letter and email with map of Project area

APPENDIX B (CONFIDENTIAL): CALIFORNIA OFFICE OF HISTORIC PRESERVATION DPR-523 FORMS

CONFIDENTIAL APPENDIX UNDER SEPARATE COVER

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APPENDIX C: GENERAL LAND OFFICE RECORDS WITHIN ONE MILE OF THE PROJECT

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Table C-1. General Land Office Land Patents within One Mile of the Project

BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECT/ BLOCK	AUTHORITY
CALA 0079580	Russell A. Duquette	1/20/1954	70	Lot 1 NE¼ SW¼, Lot 2 E½SE¼SW¼, Lot 3 NW¼ SE¼ SW¼	27	Desert Land Act 1877
CALA 0006914	R. Elliott, R. Merwin	7/15/1915	160	W½ SW¼	27	Homestead Entry 1862
CALA 0169319	W. E. Epperson	5/14/1965	40	SE¼ NW¼	27	Sale-Title 32 Ch. 7
CALA 0169319 01	W. E. Epperson	5/14/1965	40	NE¼ NW¼	27	Sale-Title 32 Ch. 7
CALA 0003815	A. F. Gardner	10/22/1912	160	SE¼	27	Homestead Entry 1862
CALA 0004263	William A. Taber	10/31/1916	160	NE¼	27	Homestead Entry 1862
CALA 0049018	Frank D. Thomas	1/9/1935	160	W½ NW¼	27	Homestead Entry 1862
CALA 0079580	Elizabeth E. Estle and Joe G. Joseph	7/16/1968	160	Lot 1 S½ NE¼, Lot 2 W½ SE¼	28	Desert Land Act 1877
CALA 0006914	County of Riverside	9/10/1948	4287.5	W½	28	Quit Claim Deed by GSA 1935
CALA 0169319	William A. Taber	10/31/1916	160	NE¼	27	Homestead Entry 1862
CALA 0078967	Gus O. Dodson	11/7/1912	160	NW¼	28	Sale-Cash Entry 1820
CALA 0142405	County of Riverside	9/10/1948	4287.5		29	Quit Claim Deed by GSA 1935
CALA 0011582	State of California	12/17/1973	0.17	Lot/Trct 57	32	Acquired Gifts
CALA 0142405	State of California	5/13/1922	2069.11	NE¼	32	Indemnity Selections 1927
CACA 000344	Connie Basha	9/20/1955	160	SE¼	33	Desert Land Act 1877
CACA 017527 02	Lawrence Borba, Elizabeth E. Estle	7/16/1968	160	NE¼	33	Desert Land Act 1877
CALA 0095125	Ernest W. Hubner	7/14/1920	160	NW¼	33	Homestead Entry 1862
CARI 000045	Lawrence Marshall	6/27/1912	160	SW¼	33	Homestead Entry 1862
CAEC 0000760	County of Riverside	9/10/1948	4287.5	NW¼ SW¼	33	Quit Claim Deed by GSA 1935
CALA 0011068	George England	1/12/1913	160	W½ E½	34	Homestead Entry 1862
CALA 0142405	Lawrence Borba, Elizabeth E. Estle	7/16/1968	160	NE¼	33	Desert Land Act 1877
CALA 0003966	Ernest W. Hubner	7/14/1920	160	NW¼	33	Homestead Entry 1862
CALA 0002844	Francis J. Folsom	2/15/1912	160	Lot N½ NW¼, Lot 2 SW¼ NW¼, Lot 3 NW¼ SW¼	34	Homestead Entry 1862
CALA 0006873	John N. Mynes	9/14/1911	160	E½ E½	34	Sale-Cash Entry 1820

BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECT/ BLOCK	AUTHORITY
CALA 0006098	James Talbert	9/14/1911	160	Lot 1 S½ SW¼, Lot 2 SE¼ NW¼, Lot 3 NE¼ SW¼	34	Sale-Cash Entry 1820
T 7S, R 22E						
CAEC 0002216	Henry G. Douglas	2/4/1920	80.14	Lot/Trct 47	3	Homestead Entry 1862
CALA 0010614	Samuel Z. Hanlin	7/6/1916	160	Lot/Trct 53	3	Homestead Entry 1862
CALA 0002448	Ellbey L. Kelsey	5/3/1911	160	Lot/Trct 49	3	Homestead Entry 1862
CALA 0002447	George W. Kelsey	3/21/1910	157.39	Lot/Trct 51	3	Homestead Entry 1862
CAEC 0000661	Michael McCabe	11/17/1922	80.44	Lot/Trct 46	3	Homestead Entry 1862
CALA 0010619	Maurice J. Sheahan	1/23/1914	120	Lot/Trct 48	3	Homestead Entry 1862
CALA 0010570	Henry G. Douglas	2/4/1920	80.14	Lot/Trct 47	3	Homestead Entry 1862
CALA 0010629	Carrie Tobias, John T. Tobias	4/9/1915	40	Lot/Trct 50	3	Sale-Cash Entry 1820
CALA 0038747	Harry Tobias	7/6/1914	120	Lot/Trct 55	3	Sale-Cash Entry 1820
CALA 0086427	Samuel Z. Hanlin	10/5/1931	162.53	Lot/Trct 54	4	Desert Land Act 1877
CAEC 0005264	Mildred S. Mason, Estelle S. Weeks	6/2/1960	39.77	Lot/Trct 56	4	Desert Land Act 1877
CAEC 0004067	Walter S. Wilkinson	4/9/1923	164.14	Lot/Trct 52	4	Sale-Cash Entry 1820
CALA 0024359	Robert M. Gilliam	6/8/1922	139.73	Lot/Trct 3,4,5, and 6	5	Homestead Entry 1862
CAEC 0004066	Jonathan F. Green	7/13/1916	160	Lot/Trct 57	5	Sale-Cash Entry 1820
CALA 0084836	Zelma C. B. Salmeri, Elbert W. Weeks	10/24/1955	161.55	Lot/Trct 58	5	Desert Land Act 1877
CACAAA 009079	State of California	6/19/1951	10003.58	Lot/Trct 61	6	Indemnity Selections 1927
CACAAA 009079 03	State of California	3/28/1957	691.7	Lot/Trct 61	6	Conveyance Doc Correction 1954
CALA 0005424	William Marsden	12/21/1911	158	Lot/Trct 60	6	Sale-Cash Entry 1820
CACAAA 000575 02	State of California	7/14/1927	10158.84	NW¼ NE¼	8	Indemnity Selections 1927
CAEC 0002599	Gertrude J. Clark	8/27/1923	163.4	S½ SW¼, NE¼ SW1/4, Lot/Trct 1,2, and 3	8	Desert Land Act 1877
CAEC 0001212	Edwin R. Knox	5/3/1920	160.8	Lot/Trct 68	8	Desert Land Act 1877
CALA 0010670	Edwin Peet	4/3/1916	160	Lot/Trct 67	8	Homestead Entry 1862
CALA 0010605	Peter Burnett	11/10/1915	80	Lot/Trct 72	9	Homestead Entry 1862
CACAAA 000575 02	State of California	7/14/1927	10158.84	Lot/Trct 66	9	Indemnity Selections 1927
CALA 0013932	Emma Hartmann	10/16/1914	160	Lot/Trct 70	9	Sale-Cash Entry 1820
CAEC 0001212	Edwin Knox	5/3/1920	160.8	Lot/Trct 68	9	Desert Land Act 1877

BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECT/ BLOCK	AUTHORITY
CALA 0010577	Charles E. Oliver	4/3/1916	80	Lot/Trct 71	9	Homestead Entry 1862
CALA 0005424	Robert C. Stevenson	10/24/1914	160	Lot/Trct 73	9	Homestead Entry 1862
CALA 0010601	Edwin Williams	2/25/1922	161.28	Lot/Trct 69	9	Homestead Entry 1862
CAEC 0002774	Florence V. Bodkin	10/23/1919	158.8	Lot/Trct 78	11	Homestead Entry 1862
CAEC 0001877	Patrick H. Bodkin, Gilford M. Dunn	7/28/1915	80	Lot/Trct 80	11	Homestead Entry 1862
CALA 0022871	Patrick H. Bodkin, Peter Dieckmann	8/6/1915	40	Lot/Trct 81	11	Homestead Entry 1862
CALA 0022869	Edwin R. Knox	5/3/1920	160.8	Lot/Trct 68	8	Desert Land Act 1877
CALA 0022870	Patrick H. Bodkin, Benjamin F. Howland	8/6/1915	40	Lot/Trct 82	11	Homestead Entry 1862
CALA 0000231	James Jackson	11/8/1909	160	Lot/Trct 76	11	Homestead Entry 1862
CACAAA 089883	James E. Neighbours	1/30/1908	320	Lot/Trct 79	11	Desert Land Act 1877
CALA 0000693	Frederick F. Nelson	3/22/1909	160	Lot/Trct 77	11	Sale-Cash Entry 1820
CALA 0010606	Frederick A. White	5/19/1913	160	Lot/Trct 83	11	Sale-Cash Entry 1820
CALA 0010601	Lawrence Fleischer	1/15/1915	166.66	Lot/Trct 88	12	Homestead Entry 1862
CALA 0010655	Charles D. Gilson	5/19/1913	80	Lot/Trct 84	12	Sale-Cash Entry 1820
CALA 0010646	Edward A. Green	7/26/1916	80	Lot/Trct 85	12	Sale-Cash Entry 1820
CALA 0018533	Dennis D. Ocheltree	9/22/1919	160.34	Lot/Trct 87	12	Homestead Entry 1862
CALA 0010654	James M. Ocheltree	2/4/1915	160	Lot/Trct 86	12	Sale-Cash Entry 1820
CALA 0010653	Frederick A. White	5/19/1913	160	Lot/Trct 83	12	Sale-Cash Entry 1820
CALA 0010606	Harry S. Dye	11/25/1910	160	Lot/Trct 93	12	Homestead Entry 1862
CALA 0003454	Wayne H. Fisher, George H. Timmings	3/30/1921	80.14	B, Lot/Trct 90	13	Desert Land Act 1877
CAEC 0003220	Patrick H. Bodkin, Benjamin F. Howland	8/6/1915	40	Lot/Trct 82	11	Homestead Entry 1862
CALA 0010597	Samuel H. Guthery	5/29/1913	160	Lot/Trct 91	13	Sale-Cash Entry 1820
CAEC 0001970	Olaf A. Olson	12/15/1919	171.5	Lot/Trct 92	13	Homestead Entry 1862
CALA 0010655	James Rennie	2/24/1916	92.5	Lot/Trct 95	13	Sale-Cash Entry 1820
CALA 0015516	George Timmings	1/26/1921	160.37	Lot/Trct 89	13	Homestead Entry 1862
CAEC 0001971	George Timmings	12/10/1921	80.29	A, Lot/Trct 90	13	Desert Land Act 1877
CAEC 0000691	James Haslam	5/29/1913	160	Lot/Trct 104	14	Sale-Cash Entry 1820

BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECT/ BLOCK	AUTHORITY
CALA 0010607	Charles Longworth	1/30/1908	160	Lot/Trct 96	14	Desert Land Act 1877
CACAAA 089884	Guy Prior	12/10/1920	40.62	Lot/Trct 99	14	Homestead Entry 1862
CALA 0002429	Benjamin White, Abner Peterson	1/24/1920	40.52	Lot/Trct 98	14	Desert Land Act 1877
CAEC 0001190	Samuel H. Guthery	5/29/1913	160	Lot/Trct 91	13	Sale-Cash Entry 1820
T 7S, R 21E						
CACAAA 018296 03	State of California	6/13/1957	840.14	W½ SW¼	1	Conveyance Doc Correction 1954
CACAAA 018296 04	State of California	12/21/1953	1456.86	W½ SW¼, Lot/Trct 7	1	Indemnity Selections 1927
CACAAA 020122 01	State of California	7/6/1917	1901.86	SE¼, E½ SW¼	1	Indemnity Selections 1927
CALA 0043048	Russell D. Freeman	1/17/1928	158.38	S½ NW¼, Lot/Trct 5, Lot/Trct 6	1	Homestead Entry 1862
CALA 0040951	Edmond B. Kasold	9/20/1927	158.66	S½ NE¼, Lot/Trct 3, Lot/Trct 4	1	Homestead Entry 1862
CALA 0043961	William Egan, Kate Thomas, Roscoe Buckner	1/20/1928	120	W½ SW¼	2	Sale-Cash Entry 1820
NONE IN SECTION 3						
CALA 0043923	Albert Edmiston	1/3/1930	316.19	S½ NW¼, Lot/Trct 5, Lot/Trct 6	4	Homestead Entry 1862
CALA 0043639	Starr Titus	6/22/1928	315.84	S½ NW¼, Lot/Trct 5, Lot/Trct 6	5	Homestead Entry 1862
CALA 0043962	Alice Wedeking, Margaret Kelo, Diedrich Wedeking	8/27/1929	149.55	N½ SW¼, N½ SE¼	5	Desert Land Act 1877
CALA 0043984	Myron T. Johnston	12/21/1931	317.88	Lot/Trct 5,6,11,12,13,14,19,20	6	Homestead Entry 1862
CALA 0044010	Steve Kostick	1/21/1931	253.59	Lot/Trct 7,8,9,10,15,16,17,18	6	Homestead Entry 1862
CACAAA 020122 01	Carl A. Benson	11/26/1913	160	NE¼	8	Sale-Cash Entry 1820
CALA 0011526	John L. Price	4/11/1928	154.5	N½ NW¼, SW¼ NW¼, SE¼ NW¼	8	Homestead Entry 1862
CALA 0043935	Josef Siebold	9/18/1913	160	SE¼	8	Sale-Cash Entry 1820
CALA 0011527	Perry A. Ball	10/30/1912	160	NW¼	9	Sale-Cash Entry 1820
CALA 0011525	Carl A. Benson	11/26/1913	160	NE¼	8	Sale-Cash Entry 1820
CACAAA 012277 02	State of California	11/23/1953	1991.63	SE¼	11	Indemnity Selections 1927
CACAAA 012277 03	State of California	6/10/1957	1297.17	SE¼	11	Conveyance Doc Correction 1954
CALA 0038266	Virginia L. Cunningham, William D. Hammell	5/29/1951	80	S½ SW¼	12	Desert Land Act 1877

BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECT/ BLOCK	AUTHORITY
CALA 0046019	Claude P. Kitchen	3/29/1930	160	SE¼	12	Homestead Entry 1862
CALA 0045611	John W. Kline	11/7/1931	160	NE¼	12	Homestead Entry 1862

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APPENDIX D (CONFIDENTIAL): CULTURAL RESOURCE LOCATION MAPS

CONFIDENTIAL APPENDIX UNDER SEPARATE COVER

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APPENDIX E: RIVERSIDE COUNTY REQUIREMENTS

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LEVEL OF SIGNIFICANCE CHECKLIST
For Archaeological Resources
(Must be attached to report)

(Check the level of significance that applies) APN: See table below		Project No: 122512	EA Number:
□ Potentially Significant Impact	**X** Less than Significant With Mitigation Incorporated	□ Less than Significant Impact	□ No Impact

Historic Resources

Would the project:

Alter or destroy a historic site? Yes. A World War II historic district, the Blythe Army Air Base (BAAB) (33-018837), located immediately adjacent to a western boundary of the Project, had been recorded in 2010 and recommended eligible for listing on the NRHP. Although the boundaries of the historic district as recorded in 2010 did not extend into the Project area, remnant features of the BAAB were found by POWER within the proposed solar Project boundaries. These features were documented and added to the existing district record. POWER recommends that the features within the Project area retain sufficient integrity to be considered contributing elements to the district. Site 33-018837 qualifies as a historical resource and would potentially be altered by the proposed Project.

Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations §15064.5? Yes. Based on the proposed Project site plan, several of the elements of 33-018837 would be physically removed or altered during Project construction, while other elements would be avoided. The proposed Project would potentially cause a substantial adverse change in the significance of this historical resource.

Is the resource listed in, or determined to be eligible by the State Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1)? No. However, site 33-018837 has been recommended eligible to the NRHP by Mitchell (2010). This recommendation has not yet been reviewed by the State.

Findings of Fact: After considerable discussion with the Riverside County Archaeologist, it was agreed that the features of 33-018837 within the Project boundaries retain sufficient integrity to be considered contributing elements to the existing BAAB Historic District. Therefore, POWER recommends that the portion of the BAAB Historic District that extends into the Blythe Mesa Solar Project boundaries qualifies as a historical resource for the purposes of the California Environmental Quality Act (CEQA).

Proposed Mitigation: Cultural resource management recommendations will be developed in consultation with the applicant, the Bureau of Land Management, and the Riverside County Archaeologist and Historic Preservation Officer to mitigate the impact from significant to less than significant. Such measures include:

1. Expansion of the existing BAAB Historic District boundary to incorporate the resource elements of 33-018837.
2. Preparation of a Cultural Resources Management Plant (CRMP) that details resources to be protected, specifies the necessary agency and Native American notifications and coordination, and implements review and approval of the plan by BLM and County of Riverside prior to the start of construction

Monitoring: Monitors will be provided at appropriate times and places on the Project site during construction as specified in the CRMP, including during construction in areas of the former BAAB.

Archaeological Resources

Would the project:

Alter or destroy an archaeological site? No. Four previously recorded resources, seven new archaeological sites, and 23 isolated finds were identified during the survey of the Project area. Only one of the resources (33-018837, discussed above) meets the criteria for either the NRHP or the CRHR and is recommended eligible. For the purposes of CEQA, none of the other resources qualify as unique archaeological resources.

Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations §15064.5? No.

Disturb and human remains, including those interred outside of formal cemeteries? No.

Restrict existing religious or sacred uses within the potential impact area? No.

Findings of Fact: No archaeological resources are recommended eligible for listing in the CRHR not do any qualify as unique archaeological resources under CEQA.

Proposed Mitigation: No specific resource mitigation is necessary.

Monitoring Proposed: A CRMP will be prepared that may, based on agency consultation, stipulate that archaeological and/or Native American monitoring will be conducted in specific areas to protect resources in the event of inadvertent or unanticipated discovery.



Prepared By: _____ Date: **6/6/12**

PARCELS WITHIN THE SOLAR FIELD

Riverside County				City of Blythe
821110004	824102015	863040015	863100011	824101014
821120025	824102016	863040017	863100012	824101015

Riverside County				City of Blythe
821120026	824130006	863040020	863100016	824101016
821120027	824130007	863040021	879090036	824101017
821120028	863030002	863050004	879090037	824102020
821120029	863030003	863050007	879090038	824102023
821120038	863030004	863050008	879090039	824102024
821120039	863030005	863050009	879090040	824102026
821120040	863030006	863060015	879090041	824102027
821120042	863030007	863060016	879090042	824110035
821120043	863030008	863060017	879090043	824110036
821120044	863030009	863060018	879090044	824110037
821120048	863030010	863070018	879090045	824110038
824080003	863030013	863070019	879090048	824122013
824080005	863030014	863070022	879090049	
824090009	863030015	863100006	879090050	
824090024	863030016	863100008	879090051	
824102013	863030017	863100009	879110013	
824102014	863040001	863100010	879110014	

PARCELS WITHIN THE TRANSMISSION LINE ROW

Riverside County	BLM
879080013	879080020
879080014	879080021
879080028	879080022
879080032	879080024
879090048	879080026
	879080027
	879090033
	879090034
	879090035



Certificate of Completion

This certifies that **Gini Austerman** completed the required Riverside County Cultural Sensitivity Training Course on **February 17, 2011.**

Register No. **121**

Expires: **February 17, 2013**

Carolyn Syms Luna

Carolyn Syms Luna,
Planning Director

Leslie J. Mouriquand M.A., RPA
County Archaeologist

VIRGINIA AUSTERMAN, RPA
ENVIRONMENTAL SPECIALIST

YEARS OF EXPERIENCE
9

EDUCATION
> M.A., Anthropology, Emphasis Archaeology, California State University-Fullerton, 2004
> B.A., Anthropology, Emphasis Archaeology; Minor Art/Illustration, California State University-Fullerton, 2002

AREAS OF EXPERTISE
> NEPA compliance
> CEQA compliance
> Field investigations and surveys
> Section 106 consultation

SPECIAL TRAINING
> Section 106 Essentials Workshop
> CEQA Workshop, Society for California Archaeology
> Archaeological Illustration
> Union Pacific Railroad Safety Training
> BNSF Railroad Safety Training
> Mine Hazard Safety Awareness (MSHA)
> County of Riverside, Cultural Sensitivity Training

CERTIFICATION
> Registered Professional Archaeologist
> Certified Archaeological Consultant, County of Riverside (Certification #121)

AFFILIATIONS
> Society of American Archaeology
> Society for California Archaeology
> National Trust for Historic Preservation
> California Preservation Foundation

HONORS
> Society of California Archaeology Certificate of Appreciation, 2004

EXPERIENCE SUMMARY

Ms. Austerman is an archaeologist with experience in environmental consulting in all phases of cultural resources management. Her experience includes archival research, Phase I, II, and III field investigations, Native American consultation, report preparation, mitigation monitoring, and artifact curation. She has managed approximately 100 cultural resources projects and has prepared documentation under the jurisdiction of Section 106 of National Historic Preservation Act, National Environmental Policy Act, and the California Environmental Quality Act. Ms. Austerman also has experience in laboratory analyses and reporting for prehistoric lithic artifacts, historic artifacts, and marine shell analysis. She has served as a project manager, assistant project manager, field director, and researcher for private environmental planning firms, and city, state, and federal agencies. As a project manager and crew chief, she has prepared proposals, managed budgets and invoices, and managed client relations, field crews, and subconsultants.

PREVIOUS WORK HISTORY

SWCA Environmental Consultants, California

Cultural Resources Project Manager and Archaeologist responsible for conducting and managing cultural resources projects in compliance with CEQA, NEPA, and Section 106 NHPA.

LSA Associates, Inc., California

Cultural Resources Manager and Archaeologist responsible for Phase I resource identification and impact assessments for private development and public infrastructure projects; constraints analyses and feasibility studies; Native American and historical consultation; Initial Study, Mitigated Negative Declaration, Environmental Impact Report and Environmental Impact Statement support services; and projects involving coordination with multiple team members and specialists. Prepared proposals, managed budgets and invoices, and managed clients, field crews and subconsultants. Position required a working knowledge of regulations under CEQA, NEPA, Section 106, and local and county jurisdictions.

Statistical Research, Inc., California

Archaeologist, Crew Chief, and Lab Technician responsible for leading teams of archaeologists in conducting archaeological surveying and mapping projects, as well as a long-term prehistoric data recovery project in the Ballona Wetlands area of Los Angeles. Conducted and participated in over 50 projects within southern California, Arizona, and Nevada. Assisted in lab inventory, cataloguing, and analysis of the archaeological artifacts and human remains and produced over 20 osteological illustrations collected from the wetlands

project.

San Bernardino National Forest, Idyllwild Ranger Station, California

Archaeologist and Crew Chief responsible for the survey, assessment, and recording of archaeological sites located within the Thomas Mountain Range for a fuels reduction program.

LSA Associates, Inc., California

Field Crew Member and Lab Technician responsible for assisting in the excavation of a prehistoric rock shelter shell midden site on the Newport Coast. Assisted in the laboratory inventory and cataloguing of the artifacts from the site.

Statistical Research, Inc., / California State University, San Bernardino, Field School, California

Participated in a four-week field school within the Big Bear region of the San Bernardino National Forest. Tasks completed during the field school included survey and documentation of sites located near the Pan Hot Springs area.

Department of the Navy, MV22 Osprey Project, Robert Stump Training Complex, California & Arizona

Field Director for the survey, documentation, and evaluation of numerous project areas within California and Arizona Naval and Marine bases, including Barry M. Goldwater West, Chocolate Mountains Aerial Gunnery Range, and Camp Pendleton.

Alameda Corridor East, San Gabriel Trench, California

Crew Chief for a cultural resources testing and excavation project for a grade separation within the Alameda Corridor. Excavation of resources built during the Mission period and related to the San Gabriel Mission.

NextEra, Kramer Junction Solar Project, California

Crew Chief for survey, literature review, site documentation, and NRHP evaluation of three historical-period resources at the site of a new solar generation project.

Barrick Goldstrike Mines, Environmental Assessment Services, Nevada

Archaeologist responsible for a field survey for proposed mine expansion project in northern Nevada.

NV Energy, Sunrise Tap LV#1 69 kV Corridor, Nevada

Cultural Resources Specialist responsible for a field survey and site record updates for the repair of existing lines and assessment for proposed additional lines to the transmission system in Las Vegas.

NCP, Microwave and Mobile Radio EA, Nevada

Archaeologist responsible for a field survey and site record updates for and environmental assessment for a proposed new microwave transmission system.

Sheep Creek Channel Invert Restoration Project, California

Cultural Resources Specialist responsible for a literature review, field survey, site record updates, and preparation of cultural resources technical report for the Initial Study for this channel restoration project in San Bernardino County. Research indicated the presence of several historic resources for which current evaluations and updates were conducted.

Monument Fuel Break Project, California

Cultural Resources Specialist responsible for assisting in the preparation of cultural resources technical report and DPR site records for a brush removal project on BLM lands within Riverside County.

San Diego Gas & Electric Company, Sunrise Powerlink EIS/EIR, California

Archaeologist responsible for cultural and paleontological resources services for an approximately 125-mile-long transmission line in San Diego and Imperial counties. Assisted with preparation of cultural resources technical report and EIS / EIR section for alternatives routes.

BLM, Bragg Shooflies Project, California

Cultural Resources Specialist responsible for preparing the BLM Class III cultural resources inventory report for a road-grading trespass on BLM-managed lands Imperial County.

Los Angeles Unified School District, South Region Elementary School No. 3, California

Archaeologist responsible for a literature review for a proposed construction site for the LAUSD.

CAJA, Avenue of the Stars, California

Archaeologist responsible for a literature review for a constraints analysis for a proposed construction site in an undisclosed location on Avenue of the Stars in Los Angeles.

U.S. Army Corps of Engineers, San Gabriel Trench, California

Archaeologist responsible for a literature review for a proposed grade separation project in the cities of Alhambra and San Gabriel in Los Angeles County.

Norco Regional Conservancy, Lake Norconian Club Historic District, California

Archaeologist participating in the ongoing preservation efforts for the National Register listed resource. Responsibilities include consultation with the U.S. Navy Cultural Resources Southwest Division, the California Office of Historic Preservation, the California State Historical Resources Commission, the National Trust for Historic Preservation, the Advisory Council for Historic Preservation, and various state and local preservation organizations and specialists.

Moreno House Preservation, California

Archaeologist participating in the preservation efforts, significance evaluation, and nomination process for the Moreno House in Norco. Responsibilities included consultation with the landowner and the City of Norco Planning Commission and City Council.

NearCal, Lake Elsinore Auto Complex Project, California

Archaeologist responsible for a cultural resources assessment in compliance with CEQA of the proposed Lake Elsinore Auto Complex project located in Lake Elsinore in Riverside County. No resources were identified within the project boundaries.

Leighton Consulting, Fairmount Park Lake Dredging Project, California

Archaeologist responsible for research that indicated a dredging project fell within the boundaries of Fairmount Park, listed as a Landmark of the City of Riverside, as well as numerous significant prehistoric sites. Recommended mitigation measures to reduce the impact to historic resources located within the lake and surrounding landscape features.

City of Highland, Wal-Mart Superstore, California

Archaeologist responsible for a cultural resources assessment of a proposed 20-acre development for the Highland Wal-Mart Superstore in the city of Highland, San Bernardino County. The literature review indicated four cultural resources had been documented within the project boundaries, all of which were determined to be ineligible for inclusion to the National Register of Historic Places and the California Register of Historical Resources in compliance with CEQA.

Riverside County Transportation Commission, Mid-County Parkway, California

Archaeologist responsible for the survey, site testing, data recovery, and artifact illustration in compliance with Section 106 of the NHPA. This project consisted of an approximately 25-mile corridor in which were located a large volume of sensitive prehistoric resources in Riverside County.

Specialty Mines, Cushenbury 21 Mine Reclamation Project, California

Archaeologist responsible for a field survey, historic site evaluation, and recording for a mine reclamation project San Bernardino County in

compliance with CEQA. One previously undocumented historic site was identified and documented during the field survey.

United Engineering, Apple Valley / Bear Valley Environmental Impact Assessment, California

Archaeologist responsible for a cultural resources assessment for the proposed development of the Bear Valley and Apple Valley Residential Project within the town of Apple Valley in San Bernardino County. The project assessment included a field survey and site recording in compliance with CEQA.

City of Adelanto, Target Gateway Initial Study, California

Archaeologist responsible for a cultural resources assessment for a proposed commercial development in Adelanto. The project included a field survey and site recording in compliance with CEQA.

Bergantz Development Corporation, P.I. Market Demolition Project, California

Archaeologist responsible for architectural demolition monitoring for the historic P. I. Market (P-40-041174), in the city of Pismo Beach of San Luis Obispo County. The site had been previously evaluated for inclusion to the California Register of Historical Resources. In compliance with CEQA, the client was required to retain a professional historical archaeologist to document and report any artifacts of relevance located during monitoring of the demolition process that may add materially to the understanding of the building and its place in the history of Pismo Beach.

SunCal, McSweeny Farms Residential Development, California

Archaeologist responsible for participating in a survey that identified 19 prehistoric and/or historic sites within the McSweeny Farms Specific Plan area of potential effects (APE) for the proposed residential development in Riverside County. A testing and evaluation plan was developed which included data recovery, data analysis, and artifact analysis to evaluate the sites regarding their eligibility for inclusion to the National Register of Historic Places in compliance with Section 106 of the NHPA.

South Coast Winery Resort and Spa, CEQA Compliance, California

Archaeologist responsible for a records search and field survey in compliance with CEQA for a new winery in the city of Temecula in Riverside County. No cultural resources were identified as a result of the 109-acre survey.

BMLA Inc., El Cerrito Park Project, California

Archaeologist responsible for conducting an assessment of the proposed 26-acre El Cerrito Park project pursuant to CEQA. The literature review and field survey did not locate any cultural resources within the project.

Thomas Olsen Associates, French Valley Business Center, California

Archaeologist responsible for a literature review and field survey of a commercial development in Riverside County. Identified two prehistoric cultural resources within the project boundary that were potentially significant under CEQA and determined that, based on the proximity to a previously documented village site, there was a high potential for subsurface deposits, features, and artifacts associated with the site. Phase II archaeological evaluation and monitoring were recommended.

City of San Jacinto, Sanderson Avenue Widening, California

Archaeologist responsible for the literature review and field survey to determine that one cultural resource, a portion of the Colorado River Aqueduct (33-11265), crosses below ground under Sanderson Avenue in the city of San Jacinto, Riverside County. No additional resources were identified and no further investigation or monitoring was recommended in compliance with CEQA.

Kroh Architects, Calvary the Brook Project, California

Archaeologist responsible for the literature review and field survey that determined no cultural resources were present within the project boundaries pursuant to CEQA. The project fell within the community of Highgrove, Riverside County.

Lim and Nascimento Engineering Corporation, East Palm Canyon Bridge Widening Project, California

Archaeologist responsible for the literature review and field survey that determined no cultural resources were present within the project boundaries pursuant to CEQA. This project consisted of the cultural resources assessment for the 1.76-acre East Palm Canyon Bridge Widening project in Cathedral City, Riverside County.

California Business Condos, Minthorn Street Project, California

Archaeologist responsible for the historical background research and archaeological field survey of a street project within the city of Lake Elsinore, Riverside County. The survey identified one historical-period residence and related features (33-15437) which were recorded and evaluated for listing with the National Register of Historic Places and the California Register of Historical Resources. The site did not appear to be eligible for listing and, therefore, was not considered a historical resource under CEQA.

Mr. Chuck Hain, Beacon Way Project, California

Archaeologist responsible the cultural resources assessment of the Beacon Way project, located on a 0.4-acre parcel within the City of Riverside. The records search and historic background research indicate that the property is situated within a previously documented historic archaeological site (CA-RIV-4172H) which contains an extensive network of terracing, rockwork, and landscaping as well as a historic water pumping station and associated pipelines known as Mary Evans Booster Station.

Department of Public Works, City of Temecula, Temecula Education Center, California

Archaeologist responsible for the cultural resource excavation monitoring program and report in compliance with CEQA. The project was in Riverside County.

Southern California Edison, Substation Project, California

Archaeologist responsible for a records search and literature review for an approximate 45-mile project including San Timotoe Canyon and Live Oak Canyon roads for a proposed substation project within unincorporated Riverside and San Bernardino counties.

Southern California Edison, San Timoteo Canyon Road Survey, California

Archaeologist responsible for conducting a pedestrian survey of an approximately 10-mile length of San Timoteo Canyon Road in unincorporated Riverside County.

Southern California Edison, Replacement Pole Survey, California

Archaeologist responsible for surveys of deteriorating transmission line structures within Tulare, San Bernardino, and Riverside counties.

Whelton-Mohawk Cultural Survey, Arizona

Archaeologist responsible for a field survey of large tracts of land in Yuma for a federal land transfer project. The survey was in compliance with Section 106 of the NHPA.

U.S. Forest Service, Thomas Mountain Fuels Reduction Survey, California

Archaeologist responsible for a survey that relocated nine previously documented archaeological sites and identified nine previously undocumented archaeological sites Riverside County. The survey area covered approximately 10,000 acres and was conducted in compliance with NHPA.

Nellis Air Force Base, Joint Red Flag Project, Nevada

Archaeologist responsible for a survey in compliance with NHPA of multiple sections of land for potential use in military training maneuvers.

Lewis Homes, Inc., Lakeview, California

Archaeologist responsible for a survey and testing of a large section of land for residential development in Riverside County in compliance with CEQA.

U.S. Air Force, Barry M. Goldwater Range, Arizona

Archaeologist responsible for a survey and the flagging for protection of sensitive sites in Gila Bend during an ordnance removal project. The survey was conducted in compliance with NHPA.

Playa Vista, California

Archaeologist responsible for an excavation in Los Angeles County of a prehistoric and historical-period cemetery site in the Ballona Wetlands. Provided archaeological illustrations of the site.

U.S. Army Corps of Engineers, Prado Dam, California

Archaeologist responsible for construction monitoring of a historical-period site for expansion of the flood-control overflow area north of the Prado Dam in San Bernardino County.

San Bernardino National Forest, Pan Hot Springs, California

Archaeologist responsible for a survey and emergency excavation of a prehistoric site exposed as the result of a fire break.

Irvine Company, CA-ORA-269 Site, California

Archaeologist responsible for the excavation of a rock shelter shell midden site and the laboratory cataloging of artifacts on the Newport Coast in Orange County.

Publications/Reports

- Austerman, Virginia. 2009. Archaeological Survey of Nineteen Proposed MV-22 Osprey Landing Areas, Chocolate Mountains Aerial Gunnery Range, Imperial County, California. Report prepared for client, on file at the South Coast Information Center, San Diego State University, San Diego, California.
- Austerman, Virginia. 2009, Draft Cultural Resources Survey for the Proposed Oxnard Airport Land/Easement Acquisition Project, City of Oxnard, Ventura County, California. Report prepared for client, on file at the South Central Coastal Information Center, California State University, Fullerton, California.
- Austerman, Virginia. 2009. Cultural Resources Survey for the Kramer Junction Solar Energy Center Project, San Bernardino County, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San Bernardino County Museum, Redlands, California.
- Austerman, Virginia. 2008. Cultural Resources Survey for the Sheep Creek Channel Invert Restoration Project, Wrightwood, San Bernardino County, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San Bernardino County Museum, Redlands, California.
- Austerman, Virginia. 2008. Cultural Resources Assessment for the Thomas Mountain Fuels Reduction Project, San Bernardino National Forest, San Jacinto Ranger District, Idyllwild, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2008. Cultural Resources Assessment for the Highland Wal-Mart Superstore Project, City of Highland, San Bernardino County, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San

Bernardino, California.

- Austerman, Virginia. 2008. Cultural Resources Assessment for the San Sevaine Multiple Family Residential Affordable Housing Project, City of Rancho Cucamonga, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San Bernardino, California.
- Austerman, Virginia. 2008. Cultural Resources Assessment for the Riverside Community College District for the Nursing and Physical Sciences Building in the Downtown Riverside Campus, City of Riverside, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2008. Cultural Resources Assessment for the Magnolia Avenue Widening-Cahuenga Boulevard to Vineland Avenue Project, City of Los Angeles, California. Report prepared for client, on file at the South Central Coastal Information Center, CSUF, Fullerton, California.
- Austerman, Virginia. 2007. Cultural Resources Assessment for the Fairmount Park Lake Dredging Project, City of Riverside, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2007. Cultural Resources Revisions to the Mine Reclamation Plan 96M-02, Arctic Canyon, Cushenbury 21 and Marble Canyon Quarries Project, Lucerne Valley, San Bernardino County, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San Bernardino Museum, Redlands, California.
- Austerman, Virginia. 2007. Cultural Resources Assessment for the Sanderson Avenue Widening Project, City of San Jacinto, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2007. Cultural Resources Assessment for the Adelanto Target Gateway Project, City of Adelanto, San Bernardino County, California. Report prepared for client, on file at the San Bernardino Archaeological Information Center, San Bernardino County Museum, Redlands, California.
- Austerman, Virginia. 2007. Cultural Resources Assessment for the French Valley Business Center, Unincorporated Area of Riverside County, Riverside, California. Report prepared for client, on file at the Eastern Information Center, UCR. Riverside, California.
- Austerman, Virginia, with Casey Tibbett. 2007. Cultural Resources Assessment for the Minthorn Street Project, City of Lake Elsinore, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2007. Cultural Resources Assessment for the Bear Valley/Apple Valley Project, Town of Apple Valley, San Bernardino County, California. Report prepared for client, on file at San Bernardino County Archaeological Center, San Bernardino County Museum, Redlands California.
- Austerman, Virginia. 2006. Archaeological Monitoring Program for Temecula Education Center, City of Temecula, Riverside County, California. Report prepared for client, on file at Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2006. Cultural Resources Assessment for the Mission Creek Project, City of Desert Hot Springs, Riverside County, California. Report prepared for client, on file at Eastern Information

Center, UCR, Riverside, California.

- Austerman, Virginia. 2006. Cultural Resources Assessment for the Citrus Estates Project, City of Perris, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2006. Cultural Resources Assessment of the Murrieta Date Street Project, City of Murrieta, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2006. Archaeological Monitoring Report for the Stoneridge Ranch Project, City of Moreno Valley, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2006. Cultural Resources Assessment for the Village Walk Project, City of Murrieta, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR, Riverside, California.
- Austerman, Virginia. 2006. Cultural Resources Assessment for the Valle Reseda Project, City of San Jacinto, Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR Riverside, California.
- Austerman, Virginia. 2006. Cultural Resources Assessment for the Baxter Street Project, in an Unincorporated Area of Riverside County, California. Report prepared for client, on file at the Eastern Information Center, UCR Riverside, California.
- Austerman, Virginia, with Kenneth Becker. 2005. Cultural Resources Survey of the Feole Property, APN 0405-052-02, Hesperia, San Bernardino, California. Draft report prepared for Lewis Operating Corp., Upland, California. Statistical Research, Inc., Technical Report 05-44; Redlands, California.
- Austerman, Virginia, with Katherine H. Pollack and Michael K. Lerch. 2005. Deteriorated Pole Replacement Project: Archaeological Survey of Five Pole Locations on the Valley-MWD-Stetson 115 kV Transmission Line, Riverside County, California. Draft report prepared for Southern California Edison Company, Rosamond, California. Statistical Research, Inc. Technical Report 05-71; Redlands, California.
- Austerman, Virginia, with Katherine H. Pollack and Michael K. Lerch. 2005. Deteriorated Pole Replacement Project: Archaeological Survey of One Pole Location on the Eucalypts 12kV Transmission Line, City of Chino Hills, San Bernardino County, California. Draft report prepared for Southern California Edison Company, Rosamond, California. Statistical Research Inc., Technical Report 05-72; Redlands, California.
- Austerman, Virginia, with Katherine H. Pollack and Michael K. Lerch. 2005. Deteriorated Pole Replacement Project: Archaeological Survey of One Pole Location on the Cram 12kV Transmission Line, San Bernardino National Forest, San Bernardino County, California. Draft report prepared for Southern California Edison Company, Rosamond, California. Statistical Research, Inc., Technical Report 05-73; Redlands, California.
- Austerman, Virginia, with Katherine H. Pollack and Michael K. Lerch. 2005. Archaeological Survey of a 2.75 Mile Section of the Etiwanda-Arch line-Cucamonga-Genomic 66kV Transmission Line to be Rebuilt, Riverside County, California. Draft report prepared for

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- Austerman, Virginia, with Katherine H. Pollack and Michael K. Lerch. 2005. Archaeological Survey of a 3000 Foot Section of the Bloomington-Colton-Colton-Cement 66kV Transmission Line to be Rebuilt, Riverside County, California. Draft report prepared for Southern California Edison Company, Rosemead, California. Statistical Research, Inc., Technical Report 05-75; Redlands, California.
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- "When a National Register Historic District Falls through the Cracks: Rescuing the Lake Norconian Club." Poster presented at the Society for American Archaeology annual meeting, Vancouver, British Columbia, March 2008.
- "Indigenous Imagery of Orange County, California." Poster presented at the Society for American Archaeology annual meeting, Austin, Texas, April 2007.
- "Structures of Unknown Origin"; Society for California Archaeology Southern Data Sharing Meeting, San Diego, California, November 2003.
- "The Date Debate: The Effects of Technological Dating on the Stylistic Chronologies of the Decorated Caves of the Upper Paleolithic Franco-Cantabrian Region", CSU Fullerton, Fall Colloquia, November 2002.

APPENDIX D2
ARCHAEOLOGICAL RESOURCES AND BUILT ENVIRONMENT SURVEY
TRANSMISSION LINE ALTERNATIVES
SUPPLEMENTAL REPORT

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February 2013

BLYTHE MESA SOLAR PROJECT

Archaeological Resource and Built Environment Survey

Transmission Line Alternatives Supplemental Report

Riverside County, California

Riverside County Planning Department Case Number CUP 03685

BLM Cultural Resource Use Permit No. CA-09-36
Fieldwork Authorization No. 66.66 11-18 (Issued 6/5/11)
Fieldwork Authorization No. 66.66 12-16 (Issued 5/24/12)

PROJECT NUMBER:
122512

PROJECT CONTACT:
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(208) 288-6323

LEGAL DESCRIPTION: T7S, R21E, Sections 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12

ACREAGE: 454 acres

USGS QUADRANGLES: Roosevelt Mine

KEY WORDS: Inventory, Historic Sites, Archaeological Sites, Riverside County, P-33-014150, P-33-017319, P-33-019612, P-33-019682, P-33-019703, P-33-019704, P-33-019712, P-33-019714, P-33-019733, P-33-019736, P-33-019737, P-33-019739, P-33-019760, P-33-019770, P-33-020317, P-33-021130, P-33-021131, P-33-021132, P-33-021133, P-33-021134, P-33-021135, P-33-021137

FIELDWORK CONDUCTED: June-July 2012

POWER ENGINEERS

BLYTHE MESA SOLAR PROJECT
ARCHAEOLOGICAL RESOURCE AND BUILT ENVIRONMENT SURVEY
TRANSMISSION LINE ALTERNATIVES SUPPLEMENTAL REPORT
RIVERSIDE COUNTY, CALIFORNIA

PREPARED FOR:

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Blythe Mesa Solar Project
Archaeological Resource and Built Environment Survey
Transmission Line Alternatives Supplemental Report, April 2013
Errata Sheet (responses to County comments), September 2013

County Comment 7/22/13	Errata
Cover Page	Replace cover page with attachment
Title page	Replace on Title Page *PREPARED FOR:* *Applicants* *SOLAR STAR BLYTHE MESA 1, LLC* *and* *RENEWABLE RESOURCES GROUP* *5700 WILSHIRE BLVD., SUITE 330* *LOS ANGELES, CALIFORNIA 90036* *(323) 936-9303* *Lead Agencies* *BUREAU OF LAND MANAGEMENT* *RENEWABLE ENERGY COORDINATION OFFICE* *CALIFORNIA DESERT DISTRICT* *MORENO VALLEY, CALIFORNIA* *and* *COUNTY OF RIVERSIDE* *PLANNING DEPARTMENT* *4080 Lemon Street, 12th Floor* *P.O. Box 1409* *RIVERSIDE, CALIFORNIA 92502-1409* *(951) 955-1811* *PREPARED BY:* *POWER ENGINEERS, INC.* *731 EAST BALL ROAD, SUITE 100* *ANAHEIM, CALIFORNIA 92805* *(714) 507-2700* *GINI AUSTERMAN, JOHANNA MARTY* *and JIM RUDOLPH (PRINCIPAL INVESTIGATOR)*

Page 6, fourth paragraph	Insert the following text: "Archaeological resources were divided into two categories: archaeological sites and isolated finds. Isolated finds are here defined as three or fewer prehistoric artifacts of the same type (e.g., flakes or sherds) or five or fewer historic artifacts (e.g., cans, bottle glass), that are spatially discrete from any other artifacts by a minimum distance of 30 meters. Archaeological sites are defined as four or more prehistoric artifacts or six or more historic artifacts within a 10-meter-square area.
Page 10, Table 3, last row	Replace: "RI-8730*" with "RI-8730"
Page 14, second paragraph, beginning with second sentence	Change the following text: "A total of 23 cultural resources were recorded or revisited as part of the BLM Class III survey, as described in Table 5, including 15 previously recorded archaeological sites and isolated finds ~~resources~~ (see Table 4) and eight newly recorded archaeological sites and isolated finds. Of the 23 resources, 14 are archaeological sites, of which seven are prehistoric and eight are historic (one site has both prehistoric and historic components). Nine of the resources within the APE are isolated finds, of which four have prehistoric artifacts and six are historic (one isolated find contained both prehistoric and historic artifacts). There were no architectural resources within the APE."
Page 14, third paragraph, first sentence	Replace with the following: "Of the 15 previously recorded cultural resources within the APE, all had been recorded within the past five years, some as recently as 2011, and did not require updated DPR forms because their conditions had not changed."
Page 18. Third paragraph	Insert the following text: "The site contained nearly 30 complete cans and more than 100 can fragments related to the military use of the area between 1942 and 1944. Most of the cans were in a very small (2.1-by-1.5-meter) area. This concentration included three No. 10 sanitary cans, 20 No. 2 sanitary cans, and one evaporated milk can. The manufacturing age of the cans ranges from the mid-1930s to the 1950s, but it is most likely they were discarded in a single episode. It is possible that the can scatter was deposited during military training activities associated with BAAB."
Page 18, fifth paragraph, last sentence	Insert the following text: "None of the cans and can fragments demonstrate ties with the DTC/C-AMA. The cans date to the 1930s to 1950s and are not described as military-issue (i.e. K- or C-ration tins).
Page 19, eighth paragraph	Change the following text: "ASM Affiliates revisited this site in June 2011 to perform detailed recording. Using a metal detector, ~~Applied EarthWorks~~ ASM determined that metal objects may exist beneath the surface. They also reported disturbance to part of the site by off-road vehicles."
Page 28, first paragraph	Insert the following text: "Isolated finds are here defined as three or fewer prehistoric artifacts of the same type (e.g., flakes or sherds) or five or fewer historic artifacts (e.g., cans, bottle glass), that are spatially discrete from any other artifacts by a minimum distance of 30 meters."
A-3 Table:	Insert the following title above table: "Previously Recorded Cultural Resources within One Mile of APE"
References	Reference page attached

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MANAGEMENT SUMMARY

This supplemental archaeological resource and built environment survey report has been prepared by POWER Engineers, Inc. (POWER) to summarize the results of a records search, literature review, and survey for archaeological and architectural resources potentially affected by construction, operation, and maintenance of proposed and alternative transmission lines associated with the proposed Blythe Mesa Solar Project (Project). No architectural resources were identified within the portion of the Project area of potential effects (APE) addressed in this supplemental report. This Project, which has been proposed by Renewable Resources Group and Solar Star Blythe Mesa 1, LLC, would be on both private and public land in Riverside County, California. The Blythe Mesa Solar Project Archaeological Resource and Built Environment Survey Final Report (POWER 2013) was submitted to the U.S. Department of the Interior, Bureau of Land Management (BLM) in January 2013; this document is a supplemental report addressing only the APE for the proposed 230 kilovolt (kV) transmission line and two alternatives.

The initial report (POWER 2013) addressed the results of a 2011 survey of the entire 3,587-acre electrical generating facility and associated infrastructure and of a 125-foot-wide corridor along a proposed 4.8-mile transmission line (Alternative 1, the proposed Project). It was later decided by the BLM that, to satisfy the requirements for Section 106 of the National Historic Preservation Act, the proposed transmission line APE should be 300 feet wide rather than 125 feet. Also, the BLM required the survey of two transmission line alternatives, a Northern Alternative and a Southern Alternative. This supplemental report addresses survey of the entire 300-foot off-site corridor of Alternative 1 (including resurvey of the original 125-foot corridor) and survey of the 300-foot off-site corridors of the two alternative transmission lines.

All identified cultural resources were found on BLM-managed land. None are on private land under the jurisdiction of Riverside County.

Table MS-1 presents the cultural resources identified during the inventory of the transmission line APE, ownership, recommended National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) eligibility, and project alternative. All were either archaeological sites or isolated finds. No architectural features were found.

Table MS-1. Cultural Resources within the APEs of Transmission Line Alternatives

FIELD NUMBER OR PRIMARY NUMBER	TRINOMIAL	DESCRIPTION	AGE	JURIS-DICTION	NRHP OR CRHR ELIGIBILITY RECOMMENDATION	ALTERNATIVE 1	NORTHERN ALTERNATIVE	SOUTHERN ALTERNATIVE
Archaeological Sites								
P-33-014150	CA-RIV-9100	Two-track road	Historic	BLM	Determined not eligible by SHPO 2/11/09			X
P-33-017319	CA-RIV-9009	World War II refuse scatter	Historic	BLM	Not eligible		X	
P-33-019682	CA-RIV-9997	World War II refuse scatter	Historic	BLM	Not eligible			X
P-33-019703	CA-RIV-10018	World War II fighting hole, refuse scatter	Historic	BLM	Not eligible			X
P-33-019714	CA-RIV-10028	World War II refuse scatter; one chert core	Prehistoric/Historic	BLM	Eligible pending further investigation			X
P-33-019733	CA-RIV-10047	Lithic scatter	Prehistoric	BLM	Not eligible			X
P-33-019736	CA-RIV-10050	Wood debris	Historic	BLM	Not eligible			X
P-33-019737	CA-RIV-10051	Lithic scatter	Prehistoric	BLM	Not eligible			X
P-33-019739	CA-RIV-10053	Lithic scatter	Prehistoric	BLM	Not eligible			X
P-33-019760	CA-RIV-10073	Lithic scatter	Prehistoric	BLM	Eligible pending further investigation			X
P-33-021130	CA-RIV-10962	Ceramic scatter	Prehistoric	BLM	Not eligible			X
P-33-021131	CA-RIV-10963	Ceramic scatter	Prehistoric	BLM	Not eligible			X
P-33-021132	CA-RIV-10964	Refuse scatter	Historic	BLM	Not eligible			X
P-33-021133	CA-RIV-10965	World War II refuse scatter	Historic	BLM	Not eligible		X	
Isolated Finds								
P-33-019612		Can	Historic	BLM	Not eligible		X	
P-33-019704	CA-RIV-10019	Metal debris	Historic	BLM	Not eligible			X
P-33-019712		Survey marker	Historic	BLM	Not eligible			X
P-33-019770		Flake and can	Prehistoric/Historic	BLM	Not eligible	X		
P-33-020317		Hammerstone	Prehistoric	BLM	Not eligible			X
P-33-021134		Sherds	Prehistoric	BLM	Not eligible		X	
P-33-021135		Cans	Historic	BLM	Not eligible		X	
P-33-021136		Sherds	Prehistoric	BLM	Not eligible	X		
P-33-021137		Cans	Historic	BLM	Not eligible	X		

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ACRONYMS AND ABBREVIATIONS

AMSL	above mean sea level
APE	area of potential effects
BLM	United States Department of the Interior, Bureau of Land Management
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CRHR	California Register of Historical Resources
CRUP	Cultural Resource Use Permit
DPR	Department of Parks and Recreation
DTC/CAMA	Desert Training Center/California Arizona Maneuver Area
EIC	Eastern Information Center
GLO	General Land Office
GPS	Global Positioning System
kV	kilovolt
MLD	Most Likely Descendant
MW	megawatt
NAHC	Native American Heritage Commission
NAGPRA	Native American Graves Protection and Repatriation Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
OHP	California State Office of Historic Preservation
POWER	POWER Engineers, Inc.
PRC	Public Resources Code
Project	Blythe Mesa Solar Project
PV	photovoltaic
ROW	right-of-way
RRG	Renewable Resources Group, LLC
SHPO	California State Historic Preservation Officer
SSBM	Solar Star Blythe Mesa 1, LLC.
USGS	U.S. Geological Survey

1.0 INTRODUCTION

1.1 Purpose of Report

This supplemental archaeological resource and built environment survey report has been prepared by POWER Engineers, Inc. (POWER) to summarize the results of a records search, literature review, and survey for archaeological and architectural resources potentially affected by construction, operation and maintenance of proposed and alternative transmission lines associated with the proposed Blythe Mesa Solar Project (Project). The purpose of this investigation was to identify archaeological and architectural resources within the area of potential effects (APE) and evaluate these resources for eligibility for listing on the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). Archaeological resources, but no architectural resources, were identified within the portion of the Project APE addressed in this supplemental report. This Project, which has been proposed by Renewable Resources Group (RRG) and Solar Star Blythe Mesa 1 (SSBM), would be on both private and public land in Riverside County, California. For purposes of compliance with the California Environmental Quality Act (CEQA), the County of Riverside is the lead agency, and for the segments of the transmission line crossing federal land, the U.S. Department of the Interior, Bureau of Land Management (BLM) is the lead agency. The Blythe Mesa Solar Project Archaeological Resource and Built Environment Survey Final Report (POWER 2013) was submitted to the BLM in February 2013; this document is a supplemental report addressing only the APE for the proposed 230 kilovolt (kV) transmission line and two alternatives.

The initial survey report (POWER 2013) addressed the results of a 2011 inventory of the entire 3,587-acre electrical generating facility and of a 125-foot-wide right-of-way (ROW) along a proposed 4.8-mile transmission line (Alternative 1, the proposed Project). It was later decided by the BLM that, to satisfy the requirements for Section 106 of the National Historic Preservation Act (NHPA), the proposed transmission line APE should be 300 feet wide rather than 125 feet. Also, the BLM required the survey of two transmission line alternatives, a Northern Alternative and a Southern Alternative. This supplemental report addresses survey of the entire 300-foot APE of Alternative 1 (including resurvey of the original 125-foot corridor) and survey of the 300-foot APEs of the two alternative transmission lines (Table 1; Figure 1).

Table 1. APE Acreage and Jurisdiction

	Private Land	BLM-Managed Lands	TOTAL
Solar Facility Site	3,587 acres	0 acres	3,587 acres
230 kV Transmission Line[1]			
Alternative 1[1]	1.0 mile (36 acres)	3.8 miles (138 acres)	4.8 miles (174 acres)[2]
Northern Alternative[1]	0 mile (0 acre)	5.2 miles (189 acres)	5.2 miles (189 acres)[2]
Southern Alternative[1]	0.6 mile (25 acres)	3.4 miles (120 acres)	4.0 miles (145 acres)[2]
Total Project Acreage	3,587 to 3,623 acres	120 to 189 acres	3,732 to 3,776 acres

[1]300-foot-wide corridors outside solar facility site
[2]About 1.5 miles of APE (54 acres) are shared by Alternative 1 and the Northern Alternative.

1.2 Project Overview

A detailed description of the proposed Project is included in the initial survey report (POWER 2013).



BLYTHE MESA SOLAR PROJECT

NORTHERN ALTERNATIVE

ALTERNATIVE 1

SOUTHERN ALTERNATIVE

8730

COLORADO RIVER SUBSTATION

BLYTHE AIRPORT

Nicholls Warm Springs

Legend

- Alternative 1 230 kV Line
- Northern Alternative 230kV Line
- Southern Alternative 230kV Line
- Colorado River Substation
- Proposed Solar Facility

0 3,000 6,000

Scale in Feet

1:36,000

FIGURE 1

BLYTHE MESA SOLAR PROJECT

BLYTHE MESA SOLAR PROJECT

POWER ENGINEERS RENEWABLE RESOURCES GROUP

Source: ArcGIS Online, National Geographic TOPO! 2011, USGS 7.5' Topographic Quadrangle, 1:24,000.

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The proposed Project consists of construction and operation of a 485 megawatt (MW) solar photovoltaic (PV) electrical generating facility and associated infrastructure, primarily on private land. The proposed Project would consist of two major components: 1) a solar array field utilizing single-axis solar PV trackers (3,587 acres); and 2) a 230 kV transmission line. The 3,587-acre solar array field would be entirely on private land. The proposed and alternative transmission lines would be built partly within the solar facility and partly off site between the facility and the Colorado River Substation. The ROW for each route would be 125 feet wide, but the APE established by the BLM is 300 feet wide. Depending on which alternative is selected, the transmission line APE would affect an additional 4.8 miles (174 acres), 5.2 miles (189 acres), or 4.0 miles (145 acres) outside the solar facility, primarily on BLM land. The Colorado River Substation site is not included in the APE because the facility has already been permitted and was under construction at the time of the archaeological survey.

The locations of the proposed and alternative transmission lines are on the Roosevelt Mine 7.5-minute U.S. Geological Survey (USGS) Topographic Quadrangles. The transmission line portion of the Project is in Sections 3 through 12 of Township 7 South, Range 21 East, of the San Bernardino Base Meridian.

1.2.1 Proposed 230 kV Transmission Line Location (Alternative 1)

The applicants propose to construct an 8.4-mile-long, 230 kV overhead transmission line from the proposed solar facility to the approved Colorado River Substation (Alternative 1). Approximately 3.6 miles of the transmission line would be within the solar facility. From the edge of the solar facility to the Colorado River Substation, the transmission line would extend another 4.8 miles within a 125-foot-wide ROW (3.8 miles would cross BLM-managed lands and 1.0 mile would cross private land). The transmission line would run parallel and immediately south of the Desert Southwest Transmission Line corridor. The total area of the 125-foot ROW off site would be about 73 acres. The total area of the 300-foot APE off site would be 174 acres (138 acres of BLM-managed land and 36 acres of private land) (Table 1). The parcel numbers of the property included within the Alternative 1 ROW are listed in Table 2.

1.2.2 Northern Alternative 230 kV Transmission Line Location

Similar to Alternative 1, the Northern Alternative would utilize the same alignment within the solar array field and would occupy the same BLM utility corridor. The primary difference between the proposed transmission line and the Northern Alternative is the location of the 230 kV transmission line extending outside the solar array field to the Colorado River Substation. They share a common corridor from the solar array site west for approximately 1.5 miles. At that point, the Northern Alternative would continue west on the north side of the corridor and within a 125-foot ROW entirely on BLM-managed lands, whereas Alternative 1 would continue in a more direct corridor as shown on Figure 1. Under this alternative, the total length of the 230 kV transmission line both on site and off site would be 8.8 miles; 5.2 miles would be off site entirely on BLM-managed lands. The 125-foot easement outside the solar facility boundary (also the BLM portion of the ROW) would contain 79 acres. The total area of the 300-foot APE off site would be 189 acres, all public land (Table 1). The parcel numbers of the property included within the Northern Alternative ROW are listed in Table 2.

1.2.3 Southern Alternative 230 kV Transmission Line Location

The Southern Alternative would exit the southwestern portion of the solar facility and extend approximately 4.0 miles west to the Colorado River Substation within a 125-foot ROW, across 3.4 miles of BLM-managed land and 0.6 mile of private land. The total area of the 125-foot ROW outside the solar array site would be approximately 60 acres. The total area of the 300-foot APE off site would be 145 acres, 120 acres of BLM land and 25 acres of private land (Table 1). The parcel numbers of the property included within the Southern Alternative ROW are listed in Table 2.

Table 2. Assessor Parcels within the Proposed and Alternative Transmission Line ROWs

RIVERSIDE COUNTY	BLM
Alternative 1	
879080013	879080022
879080014	879090033
879080032	879080024
	879090034
	879090035
Northern Alternative	
	879080020
	879080022
	879080033
	879080025
	879090034
	879090031
	879080021
	879090035
Southern Alternative	
879080034	879080023
	879080022
	879090033
	879080024
	879090034

2.0 INVENTORY METHODS

2.1 Historic Background and Records Search

Prior to the survey of the transmission line alternatives, POWER archaeologist Johanna Marty conducted a records search at the Eastern Information Center (EIC), housed at the University of California, Riverside on May 31, 2012. California Historical Resources Information System (CHRIS) records were reviewed to determine the location of previously recorded archaeological and architectural resources and the locations of past cultural resource surveys within one mile of the three alternatives. Also consulted were the NRHP, Archaeological Determinations of Eligibility provided by the EIC, CRHR, California Historical Landmarks, and California Points of Historic Interest. In addition, online BLM General Land Office (GLO) patent information was consulted. As part of the initial survey (POWER 2013), POWER had also consulted Art Wilson, a local historian; the General George S. Patton Memorial Museum; and the Palo Verde Historical Museum and Society.

2.2 Field Methods

POWER conducted a BLM Class III archaeological survey of approximately 454 acres of lands within the portions of the proposed and alternative 230 kV transmission line corridors outside the solar facility site. These lands included private and BLM-managed public lands. During the surveys, archaeologists walked parallel transects, using 15-meter (50-foot) intervals, to identify archaeological and architectural resources within the APE. The survey area included 150 feet on each side of the centerline of each alignment (300 feet total for each alignment) including the proposed Project (Alternative 1). The ground surface was examined for evidence of prehistoric and historic archaeological materials and historic structures. There was little vegetation and ground surface visibility was very high. No subsurface survey (e.g., shovel test pits) was conducted. A sub-meter Global Positioning System (GPS) was used to record the location of each cultural resource.

The archaeological field survey was conducted in two sessions in June and July, 2012. Archaeological sites and isolated finds were recorded at the time of discovery by collecting GPS data and photographs and measurements of artifacts. Overview photographs of survey areas were taken and comprehensive field notes were written. Previously recorded sites within the APE were revisited. However, their site records were not updated because they had been recorded or re-recorded within the last five years, sometimes as recently as 2011, and their conditions had not changed.

Archaeological resources were divided into two categories: archaeological sites and isolated finds. Isolated finds are here defined as three or fewer prehistoric artifacts of the same type (e.g., flakes or sherds), or five or fewer historic artifacts (e.g., cans, bottle glass). Archaeological sites are defined as four or more prehistoric artifacts or six or more historic artifacts within a 10-meter-square area.

All field methods were discussed with and reviewed by County Archaeologist, Leslie Mouriquand. The surveys conducted on BLM-managed lands were performed under Cultural Resource Use Permit (CRUP) #CA-09-36, in 2011 under Fieldwork Authorization #66.66 11-18 and in 2012 under Fieldwork Authorization #66.66 12-16.

2.3 Native American Coordination

Tribal consultation required under Section 106 is ongoing and is being performed by the BLM on a government-to-government basis. Section 106 Tribal consultation is not discussed in this report.

Coordination with Native American groups performed as part of the CEQA process in 2011 and 2012 is discussed in the initial survey report (POWER 2013). On May 10, 2012, the Applicants hosted an

information meeting in Palm Desert and invited Native American groups to attend. POWER provided the initial survey report, maps, and inventory forms to several Tribes. Also, two Tribal monitors observed the archaeological survey of the transmission line alternatives in June and July 2012.

3.0 INVENTORY RESULTS

3.1 Results of Background Research and Record Search

Federal land records available through the BLM GLO website (www.glorecords.blm.gov) patent list were reviewed on July 26, 2012 for homestead information within a one-mile radius of the Project. This land record data can provide background information related to the type of land grant filed, acreage amount, and date of issuance. The information is organized by the Township, Range and Section numbers rather than by the Assessor Parcel Numbers (see Table 2). Between 1911 and 1957, 24 land patents were filed within portions of the two-mile-wide study area; most of the land patents were granted under the Homestead Entry Act of 1862 and the Desert Lands Act of 1877. The results are listed in Appendix B. GLO maps for this part of California are not available online, so it was not possible to use the locations of improvements as a guide for identifying and interpreting historic archaeological sites.

The record search conducted by POWER on May 31, 2012 at the EIC showed 19 cultural resource studies were previously conducted within one mile of the alternatives. The reports are listed in Table 3, and Figure 2 illustrates the areas previously surveyed. It is estimated that, before 2012, 39 percent of the Alternative 1 APE had been surveyed (excluding the portion surveyed in 2011 by POWER), 31 percent of the Northern Alternative APE had been surveyed, and 70 percent of the Southern Alternative APE had been surveyed. Much of the land was surveyed as recently as 2010 (Enright and Mirro 2011). All of the 300-foot transmission line APEs were re-surveyed in 2012. Survey did not include any land within the Colorado River Substation, which was already permitted and under construction at the time of survey.

As a result of the record search performed in May 2012, 220 previously recorded cultural resources were identified within one mile of the transmission line alternatives, and 15 cultural resources (archaeological sites and isolated finds) were previously recorded within the 300-foot-wide off-site APE of one or more alternatives. These sites are listed in Table 4. Information on the previously documented resources is in Appendix A; Figure 3, also in Appendix A, depicts the locations of previously recorded cultural resources.

One previously recorded site, P-33-001819 (CA-RIV-1819), appeared on EIC maps to be within the APE of the Southern Alternative. However, other information on the DPR-523 form demonstrates that P-33-001819 was mapped incorrectly and that it falls outside, but within 0.5 mile, of the Southern Alternative APE.

Of the 220 resources recorded before 2011 within one mile of the transmission line alternatives (see Appendix A), 146 are archaeological sites, 66 are isolated finds, and 8 have missing information. None of the resources are standing buildings or structures. Of the archaeological sites, 78 had prehistoric components and 89 had historic components (21 of these sites had both prehistoric and historic components). Of the isolated finds, 44 had prehistoric artifacts, 24 had historic artifacts (four had both prehistoric and historic artifacts), and two inventory forms lacked descriptions on the artifacts found. The prehistoric sites are predominantly lithic and ceramic scatters. The historic sites are primarily refuse deposits, many related to World War II training in the area.

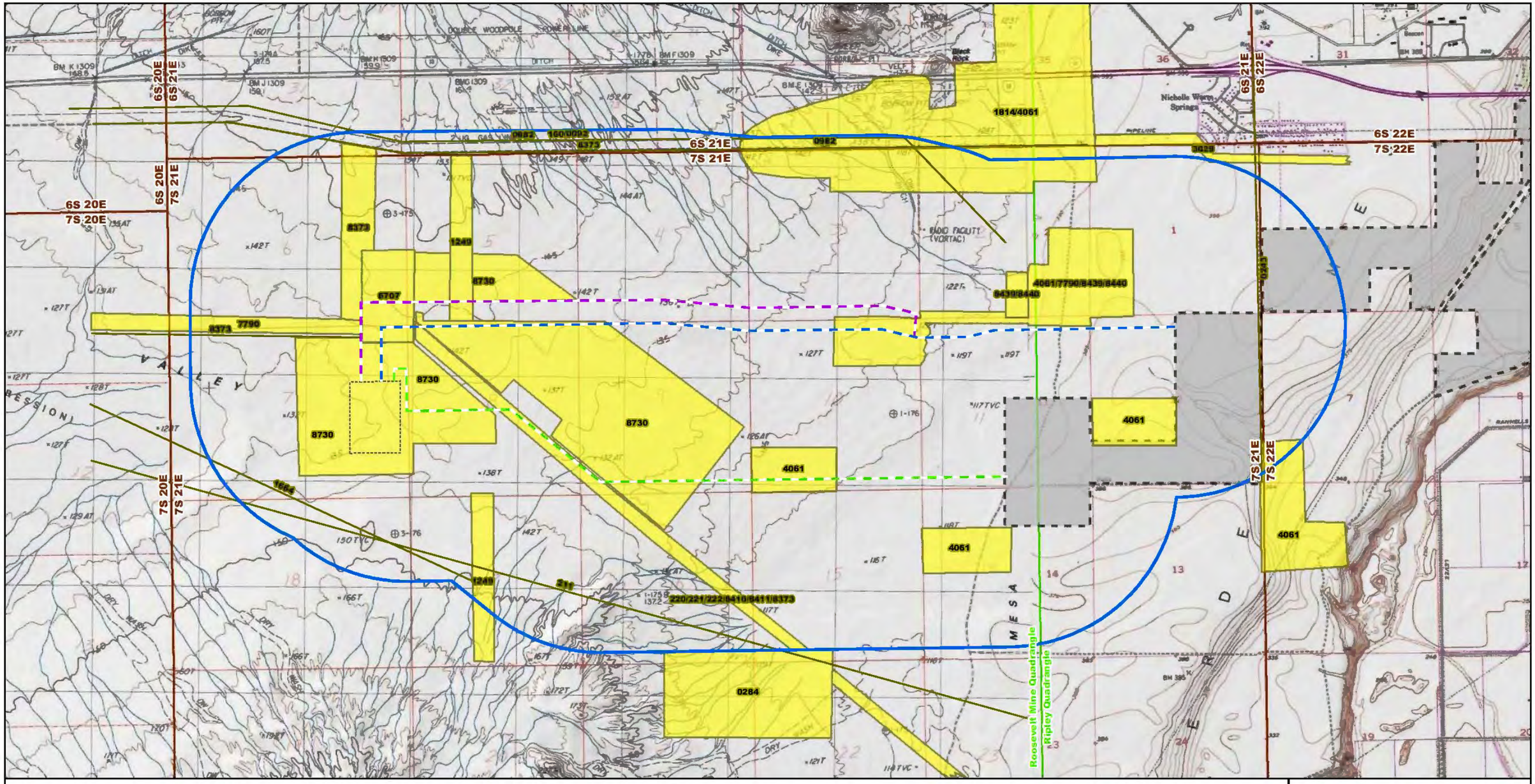
Table 3. Previous Cultural Resource Studies within One Mile of Transmission Line Alternatives

REPORT NUMBER	AUTHOR	YEAR	TITLE	NUMBER OF IDENTIFIED CULTURAL RESOURCES	WITHIN 300-FOOT APE		
					Alternative 1	Northern Alternative	Southern Alternative
RI-00092	King, T.F., G.T. Jefferson, and M. Gardner	1973	Archaeological and Paleontological Impact Evaluation: American Telephone & Telegraph Company's Oklahoma City-Los Angeles "A" Cable Route, Between the Colorado River and Coma, California	0			
RI-00160	Greenwood, R.	1977	Archaeological Resources Survey - West Coast-Mid-Continent Pipeline Project, Long Beach to Colorado River	2			
RI-00211	Craib, J.L.	1980	Archaeological Test Sampling of Site Within the La Quinta Flood Control Channel Easement	6			
RI-00220	Cowen, R.A., and K. Wallof	1977	Interim Report: Field Work and Data Analysis: Cultural Resource Survey of the Proposed Southern California Edison Palo Verde-Devers 500 kV Transmission Line	7			X
RI-00222	Cowen, R.A., and K. Wallof	1977	Final Report: Cultural Resource Survey of the Proposed Southern California Edison Palo Verde-Devers 500 kV Transmission Line	7			X
RI-00243	von Werlhof, J., and H. Pritchett	1977	Archaeological Examinations of Mesa Drive into Sundesert Sites, An Addendum Report	0			
RI-00284	Weaver, R.	1977	Cultural Resources Identification- Sundesert Nuclear Project	0			
RI-01249	Bureau of Land Management	1978	California Desert Program: Archaeological Sample Units Records for the Big Maria Planning Unit	31		X	
RI-01664	Westec Services, Inc.	1982	Cultural Resource Inventory of Seisdata Services Chuckwalla Geophysical Test Corridor, Riverside County, California	1			
RI-03029	Padon, B., S. Crownover, J. Rosenthal, and R. Conrad	1990	Cultural Resources Assessment Southern California Gas Company Proposed Line 5000, Riverside County, California	14			
RI-04061	McDonald, M., and J. Schaeffer	1998	Cultural Resources Inventory of 1542 Acres of Palo Verde Mesa Palo Verde Valley Catellus/ Bureau of Land Management Land Exchange Area	11	X	X	X

REPORT NUMBER	AUTHOR	YEAR	TITLE	NUMBER OF IDENTIFIED CULTURAL RESOURCES	WITHIN 300-FOOT APE		
					Alternative 1	Northern Alternative	Southern Alternative
RI-06707	McDougall, D., J. George, and S. Goldberg	2006	Cultural resource surveys of Alternative Routes Within California for the Proposed Devers-Palo Verde 2 Transmission Project	43	X	X	
RI-07790	Schaefer, J.	2003	A Class II Cultural Resources Assessment for the Desert-Southwest Transmission Line, Colorado Desert, Riverside and Imperial Counties, California	0		X	
RI-08373	Wilson, S., and W.T. Eckhardt	2009	Final Cultural Resources Inventory of the Proposed DPV2 Colorado River Switchyard Project, Riverside County, California			X	X
RI-08410	Carrico, R., K. Walker, and W. Eckhardt	2004	Draft Cultural Resources Inventory of the Proposed Devers to Palo Verde II 500 kV Transmission Line, Riverside County, California	42			X
RI-08411	Farrell, J., F. Budinger, and R. Carrico	2009	Final Amendment to Cultural Resources Inventory of the Proposed Blythe Energy Project Transmission Line, Riverside County, California	14			X
RI-08439	Leftwich, B.	2008	Phase I Archaeological Assessment: Blythe Solar 1 Project, Riverside County, California	2	X	X	
RI-08440	Leftwich, B.	2008	Phase II Archaeological Assessment: CA-RIV-8953 Blythe Solar 1 Project, Riverside County, California	1	X	X	
RI-8730*	Enright, E., and M. Mirro	2011	Class III Cultural Resources Survey for the Colorado River Substation Alternatives Analysis, Unincorporated Riverside County, California	87	X	X	X

Table 4. Previously Recorded Cultural Resources Within APEs of Transmission Line Alternatives

PRIMARY NUMBER	TRINOMIAL	DESCRIPTION	AGE	WITHIN 300-FOOT APE		
				ALTERNATIVE 1	NORTHERN ALTERNATIVE	SOUTHERN ALTERNATIVE
P-33-014150	CA-RIV-9100	Two-track road	Historic			X
P-33-017319	CA-RIV-9009	World War II refuse scatter	Historic		X	
P-33-019612	CA-RIV-19612	Can	Historic		X	
P-33-019682	CA-RIV-9997	World War II refuse scatter	Historic			X
P-33-019703	CA-RIV-10018	World War II fighting hole and refuse scatter	Historic			X
P-33-019704	CA-RIV-10019	Metal debris	Historic			X
P-33-019712		Survey marker	Historic			X
P-33-019714	CA-RIV-10028	World War II refuse scatter; one core	Prehistoric/Historic			X
P-33-019733	CA-RIV-10047	Lithic scatter	Prehistoric			X
P-33-019736	CA-RIV-10050	Wood debris	Historic			X
P-33-019737	CA-RIV-10051	Lithic scatter	Prehistoric			X
P-33-019739	CA-RIV-10053	Lithic scatter	Prehistoric			X
P-33-019760	CA-RIV-10073	Lithic scatter	Prehistoric			X
P-33-019770		Flake; can	Prehistoric/Historic	X		
P-33-020317		Hammerstone	Prehistoric			X



Legend

- Previous Cultural Resource Survey
- 1-Mile Records Search Buffer
- 4061 Cultural Resource Survey Report Number (refer to Table 3, Section 3.1 for key to report numbers)
- Alternative 1 230 kV Line
- Northern Alternative 230kV Line
- Southern Alternative 230kV Line
- Colorado River Substation
- Proposed Solar Facility
- USGS Quadrangle Boundary
- PLSS Township & Range

0 3,000 6,000

Scale in Feet

1:36,000

FIGURE 2

PREVIOUS CULTURAL RESOURCE SURVEYS

BLYTHE MESA SOLAR PROJECT

POWER ENGINEERS | RENEWABLERESOURCESGROUP

Source: ArcGIS Online, National Geographic TOPO! 2011, USGS 7.5' Topographic Quadrangle, 1:24,000.

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3.2 Results of Survey

The intensive pedestrian survey of the three alternatives was conducted in June and July, 2012 by POWER archaeologists. A total of 23 resources were recorded or revisited as part of the BLM Class III survey, as described in Table 5, including 15 previously recorded resources (see Table 4) and eight newly recorded archaeological sites and isolated finds. Of the 14 archaeological sites, seven are prehistoric and eight are historic (one site has both prehistoric and historic components). Of the nine isolated finds, four have prehistoric artifacts and six are historic (one isolated find contained both prehistoric and historic artifacts). There were no architectural resources within the APE.

During the field survey, 15 previously recorded cultural resources within the APE were revisited. These sites had been recorded within the past five years, some as recently as 2011, and did not require updated DPR forms because their conditions had not changed. Also, as mentioned above, site P-33-001819 (CA-RIV-01819) was placed incorrectly on EIC maps. It falls outside the APE, and was neither revisited nor re-recorded.

Table 6 summarizes the NRHP and CRHR eligibility recommendations for the cultural resources.

The DPR forms for all cultural resources within the APE can be found in Appendix D. Locations of the identified cultural resources are shown on Figure 4 (see Appendix C).

Table 5. Cultural Resources within APEs of Transmission Line Alternatives

FIELD NUMBER OR PRIMARY NUMBER	TRINOMIAL	DESCRIPTION	AGE	JURIS-DICTION	WITHIN APE		
					ALTERNATIVE 1	NORTHERN ALTERNATIVE	SOUTHERN ALTERNATIVE
Archaeological Sites							
P-33-014150	CA-RIV-9100	Two-track road	Historic	BLM			X
P-33-017319	CA-RIV-9009	World War II refuse scatter	Historic	BLM		X	
P-33-019682	CA-RIV-9997	World War II refuse scatter	Historic	BLM			X
P-33-019703	CA-RIV-10018	World War II fight hole, refuse scatter	Historic				X
P-33-019714	CA-RIV-10028	World War II refuse scatter; one chert core	Prehistoric/ Historic	BLM			X
P-33-019733	CA-RIV-10047	Lithic scatter	Prehistoric	BLM			X
P-33-019736	CA-RIV-10050	Wood debris	Historic	BLM			X
P-33-019737	CA-RIV-10051	Lithic scatter	Prehistoric	BLM			X
P-33-019739	CA-RIV-10053	Lithic scatter	Prehistoric	BLM			X
P-33-019760	CA-RIV-10073	Lithic scatter	Prehistoric	BLM			X
P-33-021130	CA-RIV-10962	Ceramic scatter	Prehistoric	BLM			X
P-33-021131	CA-RIV-10963	Ceramic scatter	Prehistoric	BLM			X
P-33-021132	CA-RIV-10964	Refuse scatter	Historic	BLM			X
P-33-021133	CA-RIV-10965	World War II refuse scatter	Historic	BLM		X	
Isolated Finds							
P-33-019612		Can	Historic	BLM		X	
P-33-019704	CA-RIV-10019	Metal debris	Historic	BLM			X
P-33-019712		Survey marker	Historic	BLM			X
P-33-019770		Flake and can	Prehistoric/ Historic	BLM			
P-33-020317		Hammerstone	Prehistoric	BLM			X
P-33-021134		Sherds	Prehistoric	BLM		X	
P-33-021135		Cans	Historic	BLM		X	
P-33-021136		Sherds	Prehistoric	BLM	X		
P-33-021137		Cans	Historic	BLM	X		

Table 6 Eligibility Recommendations for Cultural Resources Within APE

FIELD NUMBER OR PRIMARY NUMBER	TRINOMIAL	ELIGIBILITY RECOMMENDATION
Archaeological Sites		
P-33-014150	CA-RIV-9100	Determined not eligible by SHPO 2/11/09
P-33-017319	CA-RIV-9009	Not eligible
P-33-019682	CA-RIV-9997	Not eligible
P-33-019703	CA-RIV-10018	Not eligible
P-33-019714	CA-RIV-10028	Eligible pending further investigation
P-33-019733	CA-RIV-10047	Not eligible
P-33-019736	CA-RIV-10050	Not eligible
P-33-019737	CA-RIV-10051	Not eligible
P-33-019739	CA-RIV-10053	Not eligible
P-33-019760	CA-RIV-10073	Eligible pending further investigation
P-33-021130	CA-RIV-10962	Not eligible
P-33-021131	CA-RIV-10963	Not eligible
P-33-021132	CA-RIV-10964	Not eligible
P-33-021133	CA-RIV-10965	Not eligible
Isolated Finds		
P-33-019612		Not eligible
P-33-019704	CA-RIV-10019	Not eligible
P-33-019712		Not eligible
P-33-019770		Not eligible
P-33-020317		Not eligible
P-33-021134		Not eligible
P-33-021135		Not eligible
P-33-021136		Not eligible
P-33-021137		Not eligible

3.2.1 Archaeological Sites

P-33-014150 (CA-RIV-009100)
Type: Two-track road
Time Period: Historic
Setting: Sand dunes; creosote bush scrub
Elevation: 480 feet (146 meters)
Dimensions: 2 by 3,220 meters
NRHP and CRHR Eligibility Determination: Not eligible to NRHP or CRHR

Site P-33-014150 is a two-track road originally recorded by ICF Jones & Stokes in 2005, re-recorded by the same firm in 2008, and re-recorded by TetraTech in 2009 (Carrico and Eckhardt 2005; Eckhardt and Jordan 2008; Carper and Farrell 2009). The northwest/southeast trending road is five to six feet wide. Intermittent segments roughly parallel Power Line Road, which runs along the existing Southern California Edison (SCE) Devers – Palo Verde #1 transmission line. At least nine segments of the road have been identified within two miles. The maps provided by the EIC show a continuous roadway for the entire distance, but the DPR forms prepared in 2005, 2008, 2009 show the roadway as intermittent, with intact segments identified either by field survey or from aerial photographs.

Isolated artifacts found along the road included soda bottles, a sanitary can, ration cans and lids, and a boot sole, suggesting that the road may have been in use during the 1940s, 1950s, and 1960s. GLO maps from 1856 and 1919 and USGS maps were examined in 2008 and 2009, but no road was shown in this

location. Previous researchers suggested the roadway may be the survey road used for the original transmission line survey.

Site P-33-014150 was not seen or re-recorded by POWER. While the road as depicted on EIC maps crosses the APE for the Southern Alternative, POWER did not see any evidence of the road in 2012. It is possible the current APE does not include any of the previously identified segments. It is also possible construction activity in the vicinity in 2012 may have obliterated previously recorded road segments.

The site was recommended by TetraTech as not eligible to the NRHP or CRHR because it does not represent a major road system and was not used in a historically significant context. In addition, the road does not reflect a distinctive type, period, or method of construction. Site P-33-014150 was determined to be not eligible to the NRHP or the CRHR by the California State Historic Preservation Officer (SHPO) in 2009 (Farrell et al. 2009).

P-33-017319 (CA-RIV-009009)
Type: Refuse scatter
Time Period: Historic (World War II)
Setting: Sand dunes; creosote bush scrub
Elevation: 460 feet (140 meters) AMSL
Dimensions: 3 by 5 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

This site was recorded in 2008 (Eckhardt and Jordan 2008) as a small scatter of historic refuse dating to the 1942 to 1944 use of the area by the military. This site was not previously evaluated for NRHP or CRHR eligibility.

Artifacts found in 2008 included 15 cans and one glass jar. Cans included knife-punched evaporated milk cans, which were manufactured after 1931; sanitary cans, some of which may have been opened with a military P-38 opener; one key-wind can; and a key-wind can lid. The maker's mark indicates the glass jar was manufactured after 1937.

POWER revisited site P-33-017319 in 2012 and did not observe any changes, so it was not re-recorded.

The artifacts suggest the can scatter is associated with World War II use of the area. The initial survey report (POWER 2013) summarizes information about Blythe Army Air Base (BAAB) (Mitchell 2010a, b; Wilson 2008) and the Desert Training Center/California-Arizona Maneuver Area (DTC/C-AMA) (Bischoff 2000). BAAB, part of which has been recommended eligible to the NRHP (Mitchell 2010a, b; POWER 2013), was used for military training activities from 1942 through 1944, and this can scatter could have been associated with those training activities. Components of the DTC/C-AMA are also eligible to the NRHP. However, BAAB's direct association with the DTC/C-AMA lasted only eight months, from April 1942 to the end of the same year. None of the artifacts can be dated precisely to that eighth-month period, nor can they can be shown to have a direct association with the DTC/C-AMA.

Because of the nature of this small can scatter, there is no evidence that site P-33-017319 has an important association with specific events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). While General George S. Patton was associated with BAAB and DTC/C-AMA, the cans and jar do not link this site to General Patton or to the lives of any other significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). Site P-33-017319 is typical of small military refuse sites. The site is a small surface scatter of cans and other items; the potential for significant scientific data is low (NRHP Criterion D/CRHR Criterion 4).

Therefore, POWER recommends that site P-33-017319 is not eligible for listing in the NRHP or the CRHR.

P-33-019682 (CA-RIV-009997)
Type: Refuse scatter
Time Period: Historic (World War II)
Setting: Sand dunes; creosote bush scrub
Elevation: 404 feet (123 meters) AMSL
Dimensions: 22 by 6 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

Site P-33-019682 is a historic refuse scatter recorded in 2010 by Applied EarthWorks (Enright and Mirro 2011).

The site contained nearly 30 complete cans and more than 100 can fragments related to the military use of the area between 1942 and 1944. Most of the cans were in a very small (2.1-by-1.5-meter) area. This concentration included three No. 10 sanitary cans, 20 No. 2 sanitary cans, and one evaporated milk can. The manufacturing age of the cans ranges from the mid-1930s to the 1950s, but it is most likely they were discarded in a single episode during military training activities associated with BAAB.

POWER revisited site P-33-019682 in 2012 and did not observe any changes, so it was not re-recorded.

POWER's initial survey report (2013) summarizes information about BAAB (Mitchell 2010a, b; Wilson 2008) and the DTC/C-AMA (Bischoff 2000). BAAB, part of which has been recommended eligible to the NRHP (Mitchell 2010a, b; POWER 2013), was used for military training activities from 1942 through 1944, and this can scatter was probably associated with those activities. BAAB's direct association with the DTC/C-AMA lasted only eight months, from April to December 1942. None of the cans and can fragments demonstrate ties with the DTC/C-AMA.

Because of the nature of this can scatter, there is no evidence to suggest that site P-33-019682 has an important association with specific events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). The artifacts contain no elements that directly link this site to the lives of significant persons, such as General George S. Patton (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). Site P-33-019682 is typical of small military refuse sites. The potential for the site to contain significant scientific data is low (NRHP Criterion D/CRHR Criterion 4).

Therefore, POWER recommends that this site is not eligible for listing in the NRHP or the CRHR.

P-33- 019703 (CA-RIV-010018)
Type: Refuse scatter and fighting hole
Time Period: Historic (World War II)
Setting: Sand dunes; creosote bush scrub
Elevation: 357 feet (108 meters) AMSL
Dimensions: 11 by 8 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

Originally recorded by Applied EarthWorks in 2011 (Enright and Mirro 2011), site P-33-019703 is a single-use temporary military camp consisting of a fighting hole and a small refuse scatter related to the World War II use of the area between 1942 and 1944.

The fighting hole measures about 4 meters by 4 meters and is only 30 centimeters deep. The fighting hole has been eroded and is partially filled. The refuse scatter includes 12 C-ration cans and can fragments and a Barrington Hall Pure Soluble Coffee internal pry-out friction lid cylinder tin. Baker and Company produced Barrington Hall soluble (i.e., instant) coffee before World War I. During World War II, the U.S. Government took over the company.

The site integrity was described by Applied EarthWorks to be fair. The cans have been scattered and partially buried by dune sand; the fighting hole had been partially filled with sand.

POWER revisited site P-33-019703 in 2012 and did not observe any changes, so it was not re-recorded.

POWER's initial survey report (POWER 2013) briefly describes BAAB (Mitchell 2010a, b; Wilson 2008) and the DTC/C-AMA (Bischoff 2000). Part of BAAB has been recommended eligible to the NRHP as a historic district (Mitchell 2010a, b; POWER 2013). BAAB was used for military training activities from 1942 through 1944, and the can scatter and fighting hole were associated with those activities. BAAB's direct association with the DTC/C-AMA lasted only eight months, from April to December 1942. Neither the cans nor the fighting hole can be dated specifically to that eight-month period, nor can they be used to demonstrate a direct link to the DTC/C-AMA.

While there is an association between the fighting hole and can scatter with World War II activities, the limited nature of the material and features suggests site P-33-019703 did not have an important role (NRHP Criterion A/CRHR Criterion 1). The artifacts contain no elements that directly link this site to the lives of significant persons, such as General Patton (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The small quantity and limited variety of cans and the simple nature of the fighting hole indicate that the site's potential to contain significant scientific data is low (NRHP Criterion D/CRHR Criterion 4).

Therefore, POWER recommends that site P-33-019703 is not eligible for listing in the NRHP or the CRHR.

P-33-019714 (CA-RIV-010028)
Type: Isolated tool; refuse scatter
Time Period: Prehistoric and Historic (World War II)
Setting: Creosote bush scrub
Elevation: 361 feet (110 meters) AMSL
Dimensions: 9.5 by 59 meters
NRHP and CRHR Eligibility Recommendation: Eligible pending further investigation

Site P-33-019714 was recorded by Applied EarthWorks in 2011 as a refuse scatter related to the military use of the area. The site also contains a single prehistoric artifact, a quartzite core.

The historic artifacts were found mostly in a 1-meter-by-5-meter concentration of six C-ration cans and lids, and eight Barrington Hall Pure Soluble Coffee cans and lids. Elsewhere on the site there were one crushed sanitary can, one evaporated milk can, six C-ration cans or lids, one piece of milled lumber, and two D-cell batteries. Baker and Company produced Barrington Hall soluble coffee before World War I. During World War II, the U.S. Government took over the company to produce coffee for the military. The artifacts suggest the site was a single-use, temporary campsite.

Using a metal detector, Applied EarthWorks determined that metal objects may exist beneath the surface. They also saw disturbance to part of the site by off-road vehicles.

POWER revisited site P-33-019714 in 2012 and did not observe any changes, so it was not re-recorded.

POWER's initial survey report (POWER 2013) briefly describes BAAB (Mitchell 2010a, b; Wilson 2008) and the DTC/C-AMA (Bischoff 2000). Part of BAAB has been recommended eligible to the NRHP as a historic district (Mitchell 2010a, b; POWER 2013). BAAB was used for military training activities from 1942 through 1944, and the cans found at P-33-019714 were probably associated with those activities. BAAB's direct association with the DTC/C-AMA lasted only eight months, from April to December 1942. None of the artifacts demonstrate direct links with the DTC/C-AMA.

While there is an association between the can scatter with World War II activities, the limited nature of the material suggests that site P-33-019714 did not have an important role (NRHP Criterion A/CRHR Criterion 1). The artifacts contain no elements that directly link this site to the lives of significant persons, such as General George S. Patton (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The small quantity and limited variety of cans suggest the site's potential to contain significant scientific data is low. However, there is evidence that metal objects exist below the ground surface. Further investigation may be warranted to investigate the subsurface remains (NRHP Criterion D/CRHR Criterion 4).

Therefore, POWER recommends that site P-33-019714 is eligible for listing in the NRHP or the CRHR pending further investigation of subsurface deposits.

P-33-019733 (CA-RIV-010047)
Type: Lithic scatter
Time Period: Prehistoric
Setting: Creosote bush scrub
Elevation: 397 feet (121 meters) AMSL
Dimensions: 162 by 70 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

This site was recorded by Applied EarthWorks in 2011 (Enright and Mirro 2011) as a sparse prehistoric lithic assay site containing chert and quartzite tools, flakes and cobbles. The density of artifacts is about one per 230 square meters.

The artifacts reflect opportunistic early-stage reduction of rounded chert and quartzite cobbles. Items include 19 chert artifacts (one biface, one core, one edge-modified flake, five primary flakes, nine secondary flakes, and two tertiary flakes); 15 quartzite artifacts (four tested cobbles, eight primary flakes, two secondary flakes, and one piece of shatter); and four jasper artifacts (three secondary flakes and one tertiary flake).

The site integrity has been affected by vehicular traffic and alluvial activity. A two-track road passes through the site and a seasonal wash runs adjacent to the western border of the site. Applied EarthWorks thought the site was deflated and concluded the artifacts were limited to the surface. Applied EarthWorks considered the site's information potential to be low.

POWER revisited site P-33-019733 in 2012 and did not observe any changes, so it was not re-recorded.

There is no evidence that this prehistoric lithic scatter is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The very low density of artifacts and the observation by Applied EarthWorks that the site is deflated and limited to the ground surface suggest there is little potential for additional information on prehistoric chronology, settlement, or subsistence (NRHP Criterion D/CRHR Criterion 4).

Based upon the previously recorded information about the site (Enright and Mirro 2011), POWER recommends that site P-33-019733 is not eligible for listing in the NRHP or the CRHR.

P-33-019736 (CA-RIV-010050)
Type: Refuse
Time Period: Historic
Setting: Creosote bush scrub
Elevation: 403 feet (123 meters) AMSL
Dimensions: 30 by 15 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

P-33-019736 was originally recorded in 2011 by Applied EarthWorks (Enright and Mirro 2011). The site contains over 50 milled boards next to an abandoned two-track road. There was no evidence of a structure, so Applied EarthWorks concluded the site was the result of dumping. The site also contained wire nails (in boards), steel wire, and a metal gasket for a straight-six cylinder engine.

The boards are in poor condition and are deteriorating due to weathering. The boards vary in length up to 96 inches. Widths and thicknesses varied from 3 by 1 ½ inches to 6 ½ by ½ inches. These are probably nominal two-by-four and one-by-six boards, although the actual dimensions (standardized in 1961) may have been altered by weathering, drying, and warping. Based on weathering, Applied EarthWorks estimated the age of the boards as 40 to 70 years.

POWER revisited site P-33-019733 in 2012 and did not observe any changes, so it was not re-recorded.

Applied EarthWorks did not report any evidence that subsurface deposits were present, although abundant animal burrows at the site might have revealed subsurface material if any was present. There is no evidence this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features present to link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The limited variety of artifacts and the lack of subsurface deposits suggest that the potential for the site to yield important scientific or historical data is very low (NRHP Criterion D/CRHR Criterion 4).

Based on the information recorded by Applied EarthWorks (Enright and Mirro 2011), POWER recommends the site is not eligible for either the NRHP or the CRHR.

P-33-019737 (CA-RIV-010051)
Type: Lithic scatter
Time Period: Prehistoric
Setting: Nearly flat; creosote bush scrub
Elevation: 403 feet (123 meters) AMSL
Dimensions: 54 by 44 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

P-33-019737 was recorded by Applied EarthWorks in 2011 as a sparse (one artifact per 80 square meters) scatter of primary and secondary flakes.

The artifacts consist of about 11 primary flakes (five chert, five quartzite, and one vesicular volcanic), 10 secondary flakes (eight chert and two quartzite), one piece of chert shatter, and one quartzite core. Applied EarthWorks concluded that the site represents opportunistic assay and early-state reduction of naturally occurring chert and quartzite cobbles.

The site condition is fair; it appears to be deflated, and an abandoned two-track road bisects the site. Applied EarthWorks concluded that the flakes are likely limited to the surface, although shallow drift sand may obscure a few.

POWER revisited site P-33-019733 in 2012 and did not observe any changes, so it was not re-recorded.

There is no evidence that this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The very low quantity and density of artifacts and the observation by Applied EarthWorks that the site is deflated and limited to the ground surface indicate that there is little potential for additional information on prehistoric chronology, settlement, or subsistence (NRHP Criterion D/CRHR Criterion 4).

Based on the information presented by Applied EarthWorks (Enright and Mirro 2011), POWER recommends the site does not meet the criteria for listing on either the NRHP or the CRHR.

P-33-019739 (CA-RIV-010053)
Type: Lithic scatter
Time Period: Prehistoric
Setting: Sand dunes; creosote bush scrub
Elevation: 403 feet (123 meters) AMSL
Dimensions: 40 by 27 meters
NRHP and CRHR Eligibility Recommendation: Not eligible

Site P-33-019739 was originally recorded in 2011 by Applied EarthWorks. The site is a sparse (one artifact per 47 square meters) lithic scatter with primary flakes, secondary flakes, and cores.

The assemblage included sixteen artifacts: six primary flakes (three chert and three quartzite), seven secondary flakes (five chert, one quartzite and one metavolcanic), and three cores (two chert and one quartzite). Drifted sand may have obscured other artifacts. Based on the artifact assemblage, this site may have been used as a prehistoric lithic procurement and processing site (Enright and Mirro 2011). Impacts to the site include wind erosion (deflation), animal burrowing, and sheet wash.

POWER revisited site P-33-019733 in 2012 and did not observe any changes, so it was not re-recorded.

There is no evidence that this lithic scatter is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The very low quantity and density of artifacts, as well as the lack of diagnostic material, show that there is little potential for additional information on prehistoric chronology, settlement, or subsistence (NRHP Criterion D/CRHR Criterion 4).

Based on the information presented by Applied EarthWorks (Enright and Mirro 2011), POWER recommends the site does not meet the criteria for listing on either the NRHP or the CRHR.

P-33-019760 (CA-RIV-010073)
Type: Lithic scatter
Time Period: Prehistoric
Setting: sand dunes; creosote bush scrub
Elevation: 433 feet (132 meters) AMSL
Dimensions: 7 by 57 meters
NRHP and CRHR Eligibility Recommendation: Eligible pending further investigation

This site, recorded in 2011 by Applied EarthWorks (Enright and Mirro 2011), is a small scatter of chert debitage.

The artifacts include three primary flakes, one secondary flake, and one piece of shatter. Given the size of the site, the overall density is one artifact per 63 square meters. Applied EarthWorks interpreted the site as a temporary use area of early-stage lithic reduction activities.

POWER revisited site P-33-019733 in 2012 and did not observe any changes, so it was not re-recorded.

The site has been disturbed by modern off-road vehicle traffic along a two-track crossing the site. Modern dune sands have drifted across much of the site area. Applied EarthWorks suggested the site may be larger than recorded because much of the original ground surface may be covered with dune sand.

There is no evidence that this lithic scatter is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). Applied EarthWorks suggested that modern sand may obscure evidence that the site is more extensive than reflected on the surface. Given this uncertainty, and the lack of subsurface investigation, it is not possible to conclude whether the site may contain information that would help address research questions pertaining to prehistoric chronology, subsistence, or settlement. (NRHP Criterion D/CRHR Criterion 4).

Based on the information presented by Applied EarthWorks (Enright and Mirro 2011), POWER recommends that site P-33-019760 (CA-RIV-010073) may be eligible for listing on the NRHP or CRHR, pending further investigation regarding the presence or absence of subsurface deposits.

P-33-021130 (CA-RIV-10962)
Type: Ceramic scatter
Time Period: Prehistoric
Setting: Open desert
Elevation: 459 feet (140 meters) AMSL
Dimensions: 2.0 by 1.5 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

Site P-33-021130 is a small concentration of 22 prehistoric sherds, all of which are body fragments of Lower Colorado Buffware (Figure 5). The sherds appeared to be from one vessel, although they were not re-fitted. Colorado Buff is Patayan III and dates between A.D. 1500 and post-1900.

The site condition is fair; it has been affected by sheet wash and wind erosion. The topography is generally flat with low, rolling dunes vegetated with creosote bushes and low-growing xeric grasses. The ground surface visibility was 90 to 100 percent.

The site may represent a single prehistoric activity, probably a pot drop, although this was not confirmed through refitting. There is no evidence that this site is associated with events that have made a significant

contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). There are no artifacts other than sherds of the same type, which suggest that important scientific or historical data is not likely to be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, site P-33-021130 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 5. SITE P-33-021130 OVERVIEW, FACING SOUTH-SOUTHWEST

P-33-021131 (CA-RIV-10963)
Type: Ceramic scatter
Time Period: Prehistoric/Protohistoric
Setting: Open desert
Elevation: 462 feet (140 meters) AMSL
Dimensions: 6 by 2 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

This site consists of 10 fragments of prehistoric Lower Colorado Buffware sherds, all of which are body fragments that are probably from the same vessel, although they were not refitted (Figure 6). The sherds have a light brown exterior with a rough interior and coarse gritty temper. Colorado Buff is Patayan III and dates between A.D. 1500 and post-1900.

The topography is generally flat with low, rolling dunes vegetated with creosote bushes and low-growing xeric grasses; the ground visibility was 90 to 100 percent. The site condition is fair; it has been affected by sheet wash and wind erosion.

This site represents a single event, probably a pot drop. There is no evidence this site is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no diagnostic artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The ceramics may represent one vessel, although this was not confirmed

by refitting. There is no archaeological evidence to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, site P-33-021131 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 6. SITE P-33-021131 OVERVIEW, FACING NORTHEAST

P-33-021132 (CA-RIV-10964)
Type: Refuse Scatter
Time Period: Historic (1930s to 1940s)
Setting: Open desert
Elevation: 381 feet (110 meters) AMSL
Dimensions: 3.0 by 2.5 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

Site P-33-021132 is a small, compact refuse scatter of more than 25 artifacts recorded by POWER in 2012. Maker's marks on the bottles show the site dates to the 1930s and 1940s.

The topography is generally flat with low rolling dunes (Figure 7). The site is in open desert; the dunes are vegetated with creosote bushes and low-growing xeric grasses. The ground visibility was 90 to 100 percent.

Site P-33-021132 contains general household refuse dating to the early to mid-20th century. The items were evidently discarded at this location in a single episode; there are no roads or two-tracks in the immediate vicinity.

Artifacts from the site include:

- Six hole-in-top cans with ice pick openings; 2 $^{7}/_{8}$ inches in diameter and 3 $^{7}/_{8}$ inches tall. These were evaporated milk cans manufactured between 1900 and 1990 (Horn 2005).
- Six juice cans; 2 $^{5}/_{8}$ inches in diameter and 4 $^{7}/_{8}$ inches tall.

- Two indeterminate cans; 4 ¼ inches in diameter and 7 inches tall.
- Three possible paint cans; 4 ¼ inches in diameter and 4 ¼ inches tall
- One meat can, knife-opened; 3 $^{3}/_{8}$ inches in diameter and 1 ¾ inches tall.
- One clear glass bottle with a bunch of grapes embossed on the front. There is a Northwestern Glass Company maker's mark on the base. This company manufactured bottles from 1931 to the present.
- One amber glass bottle with a metal screw top lid. "Duraglass" is embossed on the heel and an Owens-Illinois maker's mark is on the base. The bottle was manufactured in 1943. (Toulouse 1971; SHA n.d.).
- One clear glass bottle with a black screw top lid. "Listerine" is embossed on the shoulder; "Lambert Pharmaceutical Co." and "Duraglass" are embossed on the heel. It also has an Owens-Illinois maker's mark on the base. The bottle was manufactured in 1942 (Toulouse 1971; SHA n.d.).
- One amber glass Purex bottle with an "LM" maker's mark on the base. The size, design and threaded screw top indicate a manufacture date from 1937, when hard rubber stoppers were replaced with metal screw tops (Sharley 2002). "LM" is the maker's mark for the Latchford-Marble Glass Company from 1938 to 1956 (Whitten n.d.).
- One clear glass ketchup bottle with an Owens-Illinois maker's mark is on the base. The maker's mark indicates that the bottle was manufactured in 1933 (Toulouse 1971).

There is no evidence that this refuse scatter is associated with events that have made a significant contribution to the broad patterns of history (NRHP Criterion A/CRHR Criterion 1). There are no artifacts or features that link this site with the lives of significant persons (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). This site and the artifacts there are typical of refuse disposal sites common to the area. There is no archaeological evidence (e.g., buried deposits) to suggest that important scientific or historical data may be obtained from the site (NRHP Criterion D/CRHR Criterion 4).

Therefore, site P-33-021132 is recommended not eligible for inclusion in either the NRHP or the CRHR.



FIGURE 7. SITE P-33-021132 OVERVIEW, FACING EAST

P-33-021133 (CA-RIV-10965)
Type: Refuse Scatter
Time Period: Historic (World War II)
Setting: Open desert
Elevation: 462 feet (141 meters) AMSL
Dimensions: 15 by 10 meters
NRHP and CRHR Eligibility Recommendation: Not Eligible

Site P-33-021133 is a small refuse scatter consisting of 10 deteriorating K-ration cans, first recorded by POWER in 2012. The site is in an area of open desert among small rolling sand dunes (Figure 8). Disturbance to the site is minimal and the result of sheet wash and wind erosion. The ground surface visibility was excellent at over 90 percent.

Six of the cans measure 2 $^{13}/_{16}$ inches tall by 2 $^{14}/_{16}$ inches wide and are key opened; several strips of metal with an attached twist key opener were also found. Four of the cans measure 4 $^{13}/_{16}$ inches tall by 2 $^{3}/_{16}$ inches wide and are embossed with "Barrington [Hall] Soluble Coffee" on the lid.

K-rations contained an individual daily combat food ration. They were developed by the U.S. Army in 1941 and first used in 1942 by U.S. airborne troops. They were used to the end of the War and were discontinued in 1948.

Baker and Company produced Barrington Hall soluble (i.e., instant) coffee before World War I. During World War II, the U.S. Government took over the company to produce coffee for K-rations.

Information on World War II-era use of the area is presented under site P-33-017319 (CA-RIV-009009). POWER's initial survey report (POWER 2013) briefly describes BAAB (Mitchell 2010a, b; Wilson 2008) and the DTC/C-AMA (Bischoff 2000). Part of BAAB has been recommended eligible to the NRHP as a historic district (Mitchell 2010a, b; POWER 2013). BAAB was used for military training activities from 1942 through 1944, and the can scatter was probably associated with those activities. BAAB's direct association with the DTC/C-AMA lasted only eight months, from April to December 1942. None of the cans demonstrate direct ties with the DTC/C-AMA.

While there is an association between the can scatter with World War II activities, the limited nature of the material suggests site P-33-021133 did not have an important role (NRHP Criterion A/CRHR Criterion 1). The artifacts contain no elements that directly link this site to the lives of significant persons, such as General George S. Patton (NRHP Criterion B/CRHR Criterion 2). This site does not contain architecture (NRHP Criterion C/CRHR Criterion 3). The small quantity and limited variety of cans suggest that the site's potential to contain significant scientific data is low (NRHP Criterion D/CRHR Criterion 4).

Therefore, POWER recommends that site P-33-021133 is not eligible for listing in the NRHP or the CRHR.



FIGURE 8. SITE P-33-021133 OVERVIEW, FACING WEST

3.2.2 Isolated Finds

For this report, isolated finds are defined as three or fewer prehistoric artifacts of the same type or five or fewer historic artifacts.

During the transmission line survey, POWER identified nine isolated finds within the Project APE, including five historic and three prehistoric isolated finds, and one isolated find with both prehistoric and historic artifacts. The historic isolated finds are primarily food cans. The prehistoric isolated finds are lithics or sherds. Isolated finds are not considered either historic properties under the NHPA or historical resources under CEQA.

P-33-019612

This isolated find is actually a number of widely dispersed isolated cans recorded in 2010 by AECOM. AECOM assumed that the cans were once associated with historic archaeological sites, but were re-deposited throughout the area by alluvial action (Vargas 2010). Each can location was recorded separately, but was assigned the same primary number. One can location is within the current APE (Figure 4, Appendix C). The can is related to the World War II military use of the area.

P-33-019704 (CA-RIV-010019)

This isolated find was documented in 2011 by Applied EarthWorks as a small refuse scatter containing only a section of heavy-gauge wire, one tapered meat can, and one cut metal disk (Enright and Mirro 2011).

P-33-019712

Originally recorded by Applied EarthWorks in 2011, this isolated find is a GLO brass-capped survey marker for a quarter section boundary between Sections 7 and 8 of Township 7 South, Range 21 East of the San Bernardino Base Meridian (Enright and Mirro 2011).

P-33-019770

This isolated find, recorded in 2010 by Applied EarthWorks, consists of two artifacts. One is a prehistoric chert flake and the other is an evaporated milk can (Enright and Mirro 2011).

P-33-020317

Originally recorded in 2012 by ASM Affiliates (Torres 2012), this resource is an isolated quartzite hammerstone.

P-33-021134

This isolated find consists of three sherds of Lower Colorado Buffware that may be from the same vessel. The temper is very coarse with inclusions of sand. At the time of the survey, the ground surface visibility was excellent at nearly 100 percent.

P-33-021135

Isolated find P-33-021135 contains four cans, three of which are evaporated milk cans and the fourth a "Coors" beer can with two church key openings.

P-33-021136

This isolated find consists of three prehistoric sherds, all of which are body fragments and probably from the same vessel. The sherds have a grayish tan exterior, a red interior, and a very coarse temper. The largest fragment measures 5.0 by 3.5 centimeters and is 0.4 centimeter thick. The ground surface visibility was 90 percent.

P-33-021137

Isolated find P-33-021137 consists of three historic cans, all of which are key-opened. Two of the cans are crushed, the third has "EST A, 12 42" embossed on the lid. The cans are within a small ephemeral drainage.

4.0 IMPACTS/EFFECTS

This section addresses impacts to cultural resources under CEQA and NEPA; however, the process for assessing effects to historic properties under Section 106 of the NHPA is described briefly in Section 4.1. The site-specific effects will be identified in the joint Environmental Impact Report/Environmental Assessment (EIR/EA) prepared in compliance with CEQA and NEPA.

4.1 Effects Under the National Historic Preservation Act

Under Section 106 of the NHPA, adverse effects to a historic property (i.e., a cultural resource eligible for or listed in the NRHP) can include physical demolition, destruction, relocation, or alteration of the property or its immediate surroundings such that the integrity of the property's location, design, setting, materials, workmanship, feeling, or association would be materially impaired or diminished.

Whenever a historic property cannot be avoided by project activities, adverse effects must be resolved through development of either a Memorandum of Agreement or Programmatic Agreement in consultation with the various consulting parties.

Section 106 regulation states that the regulatory definition of "effect," pursuant to 36 CFR 800.16 (i) is that the term means "alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the NRHP." In practice, a direct effect under Section 106 is that which is a "direct physical disturbance of a historic property." Effects that are immediate but not physical in character, such as visual intrusion, and reasonably foreseeable effects that may occur at some point subsequent to the implementation of the proposed undertaking are referred to as "indirect effects."

Direct effects on historic properties in the Project area could result from ground disturbing activities associated with the construction of the solar generation and transmission facilities, such as clearing vegetation, grading roads, installing underground infrastructure, installing tower foundations, and driving supports for solar arrays.

Historic properties can also be subject to indirect effects, such as changes in public access that increase the potential for vandalism.

4.2 Impacts Under the California Environmental Quality Act

Under CEQA, a project is considered to have an impact on the environment if it alters any characteristics of a historical resource that qualify it for inclusion in the CRHR. Furthermore, it is stated in CEQA that the lead agency may require that reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. CEQA also requires that impacts as defined by PRC 21083.2 must be addressed and mitigated as outlined in PRC 15126.4 and 15331.

Under CEQA, a checklist provides a common set of guidelines that set forth the significance criteria generally applied to cultural resources within the state. The checklist provides questions to be addressed using the following criteria:

- Potentially significant impact
- Less than significant impact with mitigation
- Less than significant impact
- No impact

Three questions pertaining to cultural resources are presented below.

A) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

B) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

C) Would the project disturb any human remains, including those interred outside of formal cemeteries?

A total of 23 cultural resources have been identified in the APE for one or more of the transmission line alternatives, including 14 other archaeological sites and nine isolated finds.

Table 7 summarizes the anticipated impacts on the 14 archaeological resources within the Project area. Isolated finds are not included in Table 7 because none of them are eligible to the NRHP or CRHR. Only two sites, both of which are within the APE for the Southern Alternative, may be eligible to the NRHP or CRHR, pending further investigation to confirm the presence or absence of subsurface cultural deposits. Adverse effects to either site would occur only if the site is determined eligible.

Under CEQA, impacts would occur only to historical resources (those eligible to the CRHR), unique archaeological resources (none of which have been identified in the Project area), or human remains (none of which have been identified in the Project area) that occur on non-federal land.

Table 7. Archaeological Sites within Project Boundaries

PRIMARY NUMBER	TRINOMIAL	NRHP/CRHR ELIGIBILITY	JURISDICTION	EFFECTS/IMPACTS RECOMMENDATION
Alternative 1				
No archaeological sites				No effect/impact
Northern Alternative				
P-33-017319	CA-RIV-9009	Recommended not eligible	BLM	No effect/impact
P-33-021130	CA-RIV-10962	Recommended not eligible	BLM	No effect/impact
P-33-021132	CA-RIV-10964	Recommended not eligible	BLM	No effect/impact
P-33-021133	CA-RIV-10965	Recommended not eligible	BLM	No effect/impact
Southern Alternative				
P-33-014150	CA-RIV-9100	Determined not eligible by SHPO 2/11/09	BLM/Private	No effect/impact
P-33-019682	CA-RIV-9997	Recommended not eligible	BLM	No effect/impact
P-33-019703	CA-RIV-10018	Recommended not eligible	BLM	No effect/impact
P-33-019714	CA-RIV-10028	Eligible pending further investigation	BLM	Possible effect/impact
P-33-019733	CA-RIV-10047	Recommended not eligible	BLM	No effect/impact
P-33-019736	CA-RIV-10050	Recommended not eligible	BLM	No effect/impact
P-33-019737	CA-RIV-10051	Recommended not eligible	BLM	No effect/impact
P-33-019739	CA-RIV-10053	Recommended not eligible	BLM	No effect/impact
P-33-019760	CA-RIV-10073	Eligible pending further investigation	BLM	Possible effect/impact
P-33-021131	CA-RIV-10963	Recommended not eligible	BLM	No effect/impact

4.2.1 Application of CEQA Significance Thresholds

A) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

For Alternative 1, no archaeological sites or historical resources were recorded and there would be no impact.

For the Northern Alternative, none of the four archaeological sites recorded have the potential to be found eligible to the NRHP or CRHR, and there would be no impact.

For the Southern Alternative, two archaeological sites recorded during the survey have the potential to be found eligible to the NRHP or CRHR pending further investigation. Both of these occur on BLM land and would be subject to evaluation under Section 106 of NHPA.

B) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

None of the archaeological sites recorded for Alternative 1, the Northern Alternative, and Southern Alternative qualify as unique archaeological resources and there would be no impact.

C) Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains have been previously recorded or discovered during surveys for Alternative 1, the Northern Alternative, or the Southern Alternative and, as such, no impacts to this type of resource are anticipated. However, should human remains be discovered on private land at any time during implementation of the Project, construction in the vicinity will halt and the coroner will be contacted immediately (PRC 7050.5). If the coroner determines that the remains do not require an assessment of cause of death and are probably Native American, then the NAHC will be contacted to identify the most likely descendents. Other steps should be implemented according to the requirements of PRC 5097.98.

5.0 RECOMMENDATIONS

Specific cultural resource management recommendations have been developed in consultation with the Applicants and the County Archaeologist. These were developed as part of the CEQA process; mitigation measures to comply with Section 106 of the NHPA and with NEPA will be developed by the BLM and included in the environmental document.

These management recommendations are defined in the Conditions of Approval and pertain to the portion of the Project area that includes privately owned land. The Conditions of Approval include the following:

- Archaeological monitoring shall be conducted by a qualified county-approved Archaeologist who shall manage and oversee archaeological monitoring of all initial ground disturbing activities and excavations of each portion of the Project site.
- A Tribal Observer designated by the Agua Caliente Band of Cahuilla Indians or other designated Tribal representative shall be allowed on-site when the Project Archaeologist is present during all initial ground disturbing activities and excavations for each portion of the Project site.
- A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be submitted to the County Archaeologist and the County Historic Preservation Officer (CHPO). The CRMMP shall address the details of all activities that must be completed in order to reduce the impacts to cultural and historical resources to a level that is less than significant. The CRMMP shall define the roles and responsibilities of cultural resource personnel and provides the timelines for the completion of the required mitigation.

During Project construction, if human remains are encountered on private land, the provisions of State Health and Safety Code Section 7050.5 will apply. This code section states that no further disturbance shall occur until the Riverside County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be Native American in origin, the County Coroner will notify the NAHC, which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner and his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC and granting of landowner permission. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

If human remains are discovered on BLM land, NAGPRA (25 U.S.C. 3001) provides a process for federal agencies to return certain Native American cultural items—human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants and culturally affiliated Indian tribes. NAGPRA includes provisions for unclaimed and culturally unidentifiable Native American cultural items, intentional excavation and unanticipated discovery of Native American cultural items on federal lands, and penalties for noncompliance and illegal trafficking. The Secretary of the Interior's implementing regulations are at 43 CFR part 10.

6.0 REFERENCES

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APPENDIX A (CONFIDENTIAL): PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN ONE MILE OF ALTERNATIVES

CONFIDENTIAL APPENDIX UNDER SEPARATE COVER

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APPENDIX B: GENERAL LAND OFFICE RECORDS WITHIN ONE MILE OF THE PROJECT

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BLM SERIAL #	NAME	ISSUE DATE	ACRES	ALIQUOT PARTS	SECTION/ BLOCK	AUTHORITY
T 7S, R 21E						
CACAAA 018296 03	State of California	6/13/1957	840.14	W½ SW¼	1	Conveyance Doc Correction 1954
CACAAA 018296 04	State of California	12/21/1953	1456.86	W½ SW¼, Lot/Trct 7	1	Indemnity Selections 1927
CACAAA 020122 01	State of California	7/6/1917	1901.86	SE¼, E½ SW¼	1	Indemnity Selections 1927
CALA 0043048	Russell D. Freeman	1/17/1928	158.38	S½ NW¼, Lot/Trct 5, Lot/Trct 6	1	Homestead Entry Act 1862
CALA 0040951	Edmond B. Kasold	9/20/1927	158.66	S½ NE¼, Lot/Trct 3, Lot/Trct 4	1	Homestead Entry Act 1862
CALA 0043961	William Egan, Kate Thomas, Roscoe Buckner	1/20/1928	120	W½ SW¼	2	Sale-Cash Entry 1820
None In Section 3					3	
CALA 0043923	Albert Edmiston	1/3/1930	316.19	S½ NW¼, Lot/Trct 5, Lot/Trct 6	4	Homestead Entry Act 1862
CALA 0043639	Starr Titus	6/22/1928	315.84	S½ NW¼, Lot/Trct 5, Lot/Trct 6	5	Homestead Entry Act 1862
CALA 0043962	Alice Wedeking, Margaret Kelo, Diedrich Wedeking	8/27/1929	149.55	N½ SW¼, N½ SE¼	5	Desert Land Act 1877
CALA 0043984	Myron T. Johnston	12/21/1931	317.88	Lot/Trct 5,6,11,12,13,14,19,20	6	Homestead Entry Act 1862
CALA 0044010	Steve Kostick	1/21/1931	253.59	Lot/Trct 7,8,9,10,15,16,17,18	6	Homestead Entry Act 1862
CACAAA 020122 01	Carl A. Benson	11/26/1913	160	NE¼	8	Sale-Cash Entry 1820
CALA 0011526	John L. Price	4/11/1928	154.5	N½ NW¼, SW¼ NW¼, SE¼ NW¼	8	Homestead Entry Act 1862
CALA 0043935	Josef Siebold	9/18/1913	160	SE¼	8	Sale-Cash Entry 1820
CALA 0011527	Perry A. Ball	10/30/1912	160	NW¼	9	Sale-Cash Entry 1820
CALA 0011525	Carl A. Benson	11/26/1913	160	NE¼	8	Sale-Cash Entry 1820
CACAAA 012277 02	State of California	11/23/1953	1991.63	SE¼	11	Indemnity Selections 1927
CACAAA 012277 03	State of California	6/10/1957	1297.17	SE¼	11	Conveyance Doc Correction 1954
CALA 0038266	Virginia L. Cunningham, William D. Hammell	5/29/1951	80	S½ SW¼	12	Desert Land Act 1877
CALA 0046019	Claude P. Kitchen	3/29/1930	160	SE¼	12	Homestead Entry Act 1862
CALA 0045611	John W. Kline	11/7/1931	160	NE¼	12	Homestead Entry Act 1862
1141347	Gerald A. Brinkman	10/29/1953	80	N 1/2	14	Desert Land Act 1877
CACAAA 018296 03	State of California	6/13/1957		NE 1/4	15	Conveyance Doc Correction 1954
1131523	Edwin L. Barnard	3/30/1951	120	N1/2NW1/4, SW1/4NW1/4	17	Desert Land Act 1877

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APPENDIX C (CONFIDENTIAL): ARCHAEOLOGICAL RESOURCES IN THE PROPOSED AND ALTERNATIVE APES

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APPENDIX D (CONFIDENTIAL): CALIFORNIA OFFICE OF HISTORIC PRESERVATION DPR-523 FORMS

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APPENDIX E
LIMITED GEOTECHNICAL EVALUATION

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Ninyo & Moore
Geotechnical and Environmental Sciences Consultants

LIMITED GEOTECHNICAL EVALUATION
BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PREPARED FOR:
Power Engineers
731 East Ball Road, Suite 100
Anaheim, California 92805

PREPARED BY:
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June 7, 2013
Project No. 107243003

June 7, 2013
Project No. 107243003

Mr. Thom Ryan
Power Engineers
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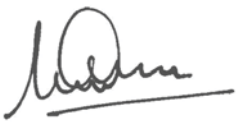
Subject: Limited Geotechnical Evaluation
Blythe Mesa Solar Project
Blythe, California

Dear Mr. Ryan:

In accordance with your authorization, we have performed a limited geotechnical evaluation for the proposed Blythe Mesa Solar Project in Blythe, California. This report presents our geologic findings, conclusions, and preliminary mitigation recommendations regarding the proposed project for inclusion in the Environmental Impact Report. This report incorporates responses to review comments from the County of Riverside. Our report was prepared in accordance with our proposal dated April 22, 2013.

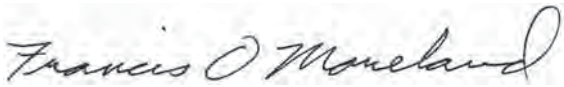
We appreciate the opportunity to be of service on this project.

Sincerely,
NINYO & MOORE





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Project Engineer



Francis O. Moreland, PG, CEG
Senior Geologist







Gregory T. Farrand, PG, CEG
Principal Geologist

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Distribution: (1) Addressee (via e-mail)

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1. INTRODUCTION

In accordance with your request and our proposal dated April 22, 2013, we have performed a limited geotechnical evaluation for the proposed Blythe Mesa Solar Project located in Blythe, California (Figure 1). This report presents our findings, conclusions, and preliminary mitigation recommendations regarding the proposed project for inclusion in the Environmental Impact Report.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services for this project included review of pertinent background data, performance of a geologic reconnaissance, limited geotechnical evaluation, and analysis with regard to the proposed project. Specifically, we performed the following tasks:

- Reviewing background information including available geotechnical reports, topographic maps, geologic data, fault maps, stereoscopic aerial photographs, and information provided by the client.
- Performing a geologic reconnaissance of the site, including the observation and photo-documentation of existing geologic conditions across the site and an evaluation of possible geologic hazards which may impact the proposed project.
- Performing subsurface exploration consisting of drilling, logging, and sampling four exploratory borings using a truck-mounted drill rig. Representative bulk and in-place soil samples were collected at selected intervals and transported to our laboratory for testing.
- Performing geotechnical laboratory testing of representative samples to evaluate soil characteristics.
- Compiling and analyzing the data obtained.
- Preparing this report presenting our preliminary findings, conclusions, and preliminary mitigation recommendations for inclusion in the Environmental Impact Report.

3. PROJECT AND SITE DESCRIPTION

The Blythe Mesa Solar Project will consist of the construction and operation of a 485-megawatt (MW) solar photovoltaic (PV) electrical generation facility. The proposed project is located on Palo Verde Mesa, north and south of Interstate 10, west of State Route 89, and east of the Blythe Airport, in Riverside County (Figure 1). The 520-MW natural gas-fired Blythe Energy Center

and Buck Substation are present in the north portion of the site. Electrical transmission lines, other solar projects, ancillary agricultural facilities, and dirt roads are present in the site vicinity.

The proposed 3,660-acre site will consist of a PV solar array field, inverters/transformers, interior collection power lines, three on-site substations, two operation and maintenance buildings, access roads, and an 8.4-mile transmission line to the Colorado River Substation.

The review of referenced topographic maps, stereoscopic aerial photographs, and background data indicates the project is situated on the Palo Verde Mesa, south of the Big Maria Mountains, west of the Palo Verde Valley, and west of the Colorado River. The site area is located within the Colorado Desert geomorphic province (Norris & Webb). The project site slopes gently toward the southeast. Elevations range from approximately 390 feet above mean sea level (MSL) in the northwest portion of the site to approximately 335 feet MSL in the southeast portion. Some incised drainage courses in the bluff along the east edge of the Palo Verde Mesa extend down to the Palo Verde Valley. In general vegetation consists of agricultural fields and citrus groves, and open desert with sparse growth of grass and creosote brush.

During the site reconnaissance, the general geologic conditions were observed across the accessible portions of the site. Selected site photographs are attached in Appendix A (Photographs 1 through 8). As discussed, the Blythe Energy Center and related Buck Substation are the dominate features present on the site north of Interstate 10. Other features include current and past agricultural activities, and scattered concrete slabs, asphalt paved roads, and piles of construction debris. Our observations on the portion of the site south of Interstate 10 included an active citrus grove, plowed fields, and former vineyards. Some eolian (blow) sand and areas of gravel (due to wind deflation) were also observed across the site.

4. SUBSURFACE EXPLORATION

Ninyo & Moore's subsurface exploration was conducted on May 14, 2013, and consisted of the drilling, logging, and sampling of four small-diameter borings to depths of up to approximately 51.5 feet. The borings were drilled using a truck-mounted drill rig equipped with 8-inch-diameter

hollow-stem augers. The boring locations were selected based on the results of our background review and field reconnaissance. The approximate locations of the exploratory borings are presented on Figure 2. The logs for the borings are presented in Appendix B.

5. LABORATORY TESTING

Laboratory testing was performed on representative soil samples collected as part of this evaluation included tests to evaluate in-situ moisture content and dry density, gradation, consolidation, shear strength, and soil corrosivity (includes pH, electrical resistivity, chloride content and sulfate content). The results of moisture and density testing are presented on the Ninyo & Moore boring logs in Appendix B. Results of the other Ninyo & Moore laboratory tests are presented in Appendix C.

6. GEOLOGY AND SUBSURFACE CONDITIONS

The findings regarding regional and site geology and groundwater conditions at the subject site are provided in the following sections.

6.1. Regional and Geologic Setting

The project area is situated in the eastern edge of the Colorado Desert Geomorphic Province. Within California, this geomorphic province encompasses an area that extends from the Colorado River on the east, the eastern Transverse Ranges on the north, the Mexican border on the south, and the Peninsular Ranges on the west (Norris and Webb, 1990; Harden, 1998). This portion of the province is characterized by broad alluvial valleys separated by steep, discontinuous, sub-parallel mountain ranges that generally trend northwest-southeast.

6.2. Site Geology

Based on our literature review, including published geologic maps and reports, and our geologic field data the project site is underlain by minor fill material and Quaternary-age alluvium. Surficial deposits of eolian sand (blow sand) and gravels are also present across

portions of the site. Generalized descriptions of the units encountered are provided in the subsequent sections. A geologic map of the region is presented on Figure 3.

6.2.1. Fill

Fill soils associated with previous agricultural activities and road grading are anticipated across much of the site and were encountered in each of our borings from the ground surface extending to depths of approximately 2.5 feet. As encountered, the fill materials generally consist of light brown and brown, dry to damp, loose to medium dense, silty sand. Scattered gravel was encountered in the fill materials.

6.2.2. Alluvium of Modern Washes

Though not encountered in our borings, Holocene age alluvium associated with modern washes (designated Qw) has been mapped near the northeastern portion of the site (United States Geological Survey [USGS], 2006). These deposits are the result of erosion, transport, and deposition of sediments caused by winter storm systems or intense summer thunderstorms. The alluvial materials are generally expected to consist of fine to coarse sand with scattered to abundant gravel to cobble-size clasts.

6.2.3. Alluvium of the Modern Colorado River Flood Plain

Though not encountered in our borings, Holocene age alluvium of the modern Colorado River flood plain (designated Qr), is mapped near the eastern boundary of the project site. These deposits are associated with flood events associated with the Colorado River and are expected to consist of fine to coarse sand, silt, and clay. These deposits are mapped immediately east of the site.

6.2.4. Eolian Sand

Though not encountered in our borings, Holocene age Eolian Sand (designated Qs) is mapped near the western portion of the project under the western portion of the proposed transmission line, and consists of unconsolidated sand dunes and sheets. The dunes are partially stabilized by vegetation.

6.2.5. Alluvial-Fan and Alluvial-Valley Deposits

Though not encountered in our borings, Holocene age alluvial-fan and alluvial-valley deposits (designated Qa_6), are mapped under portions of the proposed transmission line. This unit is characterized by sand, pebbly sand, sandy gravel and occasional eolian sand deposits. These sediments lack desert varnish.

6.2.6. Alluvial Deposits of Palo Verde Mesa

Pleistocene age alluvial deposits Palo Verde Mesa (designated Qpv) were encountered in our borings underlying the fill materials to the total depths explored. As encountered, the alluvial deposits of Pale Verde Mesa generally consist of brown and light brown, dry to damp, loose to very dense, sand, sand with silt, silty sand, and sandy silt. Scattered gravel was encountered in the alluvial deposits.

6.3. Surficial Soils

Review of the referenced soil survey report (United States Department of Agriculture [USDA], 1968) indicates surficial soils are present in the region of the subject site. A map depicting the boundaries of these soils is shown on Figure 4, Soils. A legend and general description of these soils is included on Figure 4A, Regional Soils Legend. A list of the site specific or impact soils and their classifications are shown on Figure 4B, Impacted Soils Legend. As previously discussed, much of the site has been or is currently being utilized for agricultural purposes. It is expected that the upper 1 to 3 feet of soil have been disturbed as a result of agricultural activities.

6.4. Mineral Resources

The review of the report from the Riverside County Planning Department, entitled *Fast Track 2011-01, Blythe Mesa Solar Project*, indicates the site was located in an area classified as MRZ-4 for mineral resources (areas of unknown mineral resource significance), and is not designated as being of regional or statewide significance for mineral resources.

6.5. Groundwater

The static groundwater table is anticipated to be below the depth of proposed excavations. Based on our borings at the Blythe Energy Center (Ninyo & Moore, 1999a), the static water table was found to be in excess of 90 feet below the existing ground surface or an elevation of approximately 245 feet MSL. A static water table was not encountered in our on-site borings that extended to a depth of up to approximately 51.5 feet below the ground surface. According to well data in vicinity of the subject site (California Department of Water Resources, 2013), groundwater levels in the past 40 years have varied in elevation from approximately 240 to 250 feet MSL. Groundwater levels are influenced by seasonal variations, variations in ground surface topography, precipitation, irrigation practices, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. In addition, shallow perched groundwater or groundwater seepage may also be present, particularly in or near areas of active citrus groves or other agricultural activities. Shallow groundwater can impact ground stability, and foundation design and construction.

7. GEOLOGIC HAZARDS

In general, geologic hazards associated with seismic activity include ground surface rupture, strong ground motion, and liquefaction. These hazards and other geologic considerations such as landslides, debris flows, slope stability, flood hazards, seiches, dam inundation, settlement, collapsible soils, expansive soils, erosion, and regional subsidence are discussed in the following sections.

7.1. Faulting and Seismicity

The subject site is not located within a State of California Earthquake Fault Zone (formerly known as an Alquist-Priolo Special Studies Zone) (Hart and Bryant, 1997). The project area is situated within the Sonoran zone, which is a relatively stable tectonic region located in southeastern California, southwestern Arizona, southern Nevada, and Northern Mexico (Euge and Lam, 1992). As defined by the California Geological Survey (CGS), an active fault is one that has had surface displacement during the Holocene (roughly the last 11,000 years). Potentially active faults are those that show evidence of surface displacement during the Quaternary

(roughly the last 1.6 million years) but for which evidence of Holocene movement has not been established. An inactive fault is one that has not shown evidence of surface displacement during the Quaternary. The approximate locations of the principal active faults in the region and their geographic relationship to the study area are shown on Figure 5, Fault Locations.

Table 1 lists principal known active faults within 60 miles (100 kilometers) of the subject site, the approximate fault-to-site distances, and the maximum moment magnitudes (M_{max}) as published by Cao et al. (2003) for the CGS. The approximate fault-to-site distances were calculated using the computer program FRISKSP (Blake, 2001), and from our review of published geologic maps.

Table 1 – Principal Active Faults

Fault	Approximate Fault-to-Site Distance [1] miles (kilometers)	Maximum Moment Magnitude [2] (M_{max})
Brawley Seismic Zone	57.9 (93.1)	6.4
Elmore Ranch	58.4 (93.9)	6.6
San Andreas (Coachella)	58.4 (94.1)	7.2

Notes:
[1] Blake, 2001
[2] Cao et al., 2003

7.1.1. Strong Ground Motion

The 2010 California Building Code recommends that the design of structures be based on the peak horizontal ground acceleration (PGA) having a 2 percent probability of exceedance in 50 years which is defined as the Maximum Considered Earthquake (MCE). The statistical return period for PGA_{MCE} is approximately 2,475 years. In evaluating the seismic hazards associated with the project site, we have selected a Site Class D. The site modified PGA_{MCE} is an estimated 0.22g using the USGS (USGS, 2011) ground motion calculator (web-based). The design PGA was 0.15g using the USGS ground motion calculator. These estimates of ground motion do not include near-source factors that may be applicable to the design of structures on site.

7.1.2. Ground Surface Rupture

As part of our study we have reviewed referenced geologic and fault location maps, 1959 stereoscopic aerial photographs, and relatively recent aerial photographs (2008). The photographs and fault location maps reviewed are listed in the References section of this report.

Our review of the referenced photographs (aerial and stereoscopic) included general analysis of geomorphic landforms within and adjacent to the subject site. Features evaluated included abrupt changes in topography, changes in vegetation, and possible lineaments. As discussed, the topography across the site is relatively flat, with a gentle slope to the southeast. Our review indicated no lineaments or other indications of fault related features across the site. In addition, based on our review of the referenced geologic data and fault location maps, there are no known active faults underlying the site. Accordingly, the potential for surface rupture and lurching or cracking of the ground surface as a result of a nearby seismic event is considered low.

7.1.3. Liquefaction and Seismically Induced Settlement

Liquefaction is the phenomenon in which loosely deposited granular soils and non-plastic silts located below the water table undergo rapid loss of shear strength when subjected to strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to a rapid rise in pore water pressure, and causes the soil to behave as a fluid for a short period of time. Liquefaction is known generally to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet below ground surface. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

A review of Riverside County Integrated Project Figure S-3 indicates the site is mapped within a zone described as “moderately susceptible” liquefaction associated with deep groundwater. However, our borings at the site indicate that groundwater is at a depth

greater than 50 feet. Based on the lack of shallow groundwater, it is our opinion that liquefaction and seismically induced settlement at the site are not design considerations.

7.2. Landslide and Debris Flows

Landslides may be induced by strong vibratory motion produced by earthquakes. Research and historical data indicate that seismically induced landslides tend to occur in weak soil and rock on sloping terrain. The process for zoning earthquake-induced landslides incorporates expected future earthquake shaking, existing landslide features, slope gradient and strength of earth materials on the slope. Based on review of Riverside County Integrated Project Figure S-4 and on the relatively gentle slopes in areas underlain by alluvium and the relatively dense nature of the older alluvium, the potential for seismically induced landslides and debris flows at the site is not considered likely. In addition, no landslides, debris flows or rock falls are known to present on the site based on the site reconnaissance and review of referenced documents.

7.3. Slope Stability

The review of topographic maps and preliminary project plans indicates that the proposed project will be located adjacent to the descending bluff located along the east site boundary. A review of Riverside County Integrated Project, Figure S-5, indicated this slope have a low to locally moderate susceptibility to seismically induced landslides and rockfalls. A review of the available project documents suggest that proposed improvements are not anticipated to be constructed on or near to the bluff slope.

7.4. Flood Hazard

The subject site is located on relatively flat to gently sloping terrain, west of the Colorado River. Our review of data on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) website, and Riverside County Integrated Project Figure S-9, Flood Prone Areas, indicates that the site is not located within a 100- or 500-Year Flood Zone.

7.5. Seiches

Review of topographic maps and aerial photographs do not indicate the presence of relatively large bodies of water (lakes, reservoirs, oceans) in the vicinity of the site. Several small irrigation reservoirs are located in the orchard areas of the site. These reservoirs will be removed as a result of the proposed project. Accordingly, seiches are not a design consideration.

7.6. Dam Inundation

Parker Dam on the Colorado River is located approximately 50 miles north-northeast of the project site. Review of the Riverside County Integrated Project, Figure 10, indicates the proposed project is not within a Dam Hazard Zone. Further, a review of topographic maps indicates that the site is on the order of 75 feet above existing river levels. Based on the topographic elevation above the Colorado River and the relatively broad nature of the Palo Verde Valley, inundation due to a failure of the Parker Dam is not expected to affect the project site.

7.7. Settlement

Based on the review of the referenced geotechnical report for the Blythe Energy Center, our geologic reconnaissance, and our subsurface evaluation, the underlying alluvium is expected to consist of loose to dense layers of silty sands, sands, and gravel. The soil encountered in our borings in the upper 2.5 feet has been plowed and disturbed and is in a loose condition. In boring B-2 loose material was encountered to a depth of approximately 7.5 feet. Materials below these depths were found to be medium dense or denser. Accordingly, some settlement of the loose soils underlying the near surface is possible.

7.8. Hydro-consolidation or Soil Collapse

Hydro-consolidation or Soil Collapse typically occurs in recently deposited, Holocene (less than 10,000 years old) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with man-made fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. These soils typically contain minute pores and voids. The soil particles may be supported by clay or silt, or

chemically cemented with carbonates. When saturated, collapsible soils undergo rearrangement of their grains, and the water removes the cohesive (or cementing) material, this results in rapid substantial settlement (Riverside County Integrated Project).

Based on our subsurface exploration and laboratory testing data, the hydro-consolidation potential of the soils is moderate. Additional hydro-consolidation tests should be performed to verify this during the design stages of the project.

7.9. Expansive Soils

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. Based on a review of regional geologic maps and our subsurface exploration, the deposits underlying the project site consist of relatively granular alluvial deposits. It is expected that grading recommendations would likely be specified as granular. Therefore, the potential for near-surface expansive soils at the project is considered low.

7.10. Erosion

In general, erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by varying processes and may occur in the project area where bare soil (or rock) is exposed to wind or moving water (both rainfall and surface runoff). The processes of erosion are generally a function of material type, terrain steepness, rainfall or irrigation levels, surface drainage conditions, wind velocity, and general land use. Review of geologic maps and soil data indicate that surface soils are generally comprised of sand and gravels. Based on the gentle gradients across the site, the potential for water erosion is low. However, portions of the site situated along the east boundary may be subject to water erosion down the bluff face.

Our observations indicated areas of eolian deposits (wind deposited) and areas of deflation (coarse sand and gravel concentrated due to wind erosion of the fine-grain silts and sands) are present across portions of the site. The presence of eolian sand across the site indicates that the site has been historically subject to moderate to relatively high winds. Based on review of Riverside County Integrated Project Figure S-8, the project site is moderately to highly susceptible to wind erosion.

7.11. Regional Subsidence

Subsidence is characterized as the sudden or gradual downward settling of the ground surface relative to surrounding areas, and can generally occur where deep alluvial deposits are present in valley areas. Subsidence in alluvial valley areas is typically associated with groundwater withdrawal or other fluid withdrawal from the subsurface such as oil and natural gas. Extraction of these geologic components can cause subsidence, which can result in the development of surface ground cracks and fissures, particularly near valley margins. Cracks and earth fissures can cause damage to improvements including roads, transmission lines, foundations, structures and pipelines. Review of Riverside County Integrated Project Subsidence Zone map (Figure S-7), the project area is located in a "Susceptible Area" with regard to potential subsidence. However, our review of Figure S-7 indicates the site is located outside of "Areas of Documented Subsidence".

During our site reconnaissance, we did not observe ground cracks or earth fissures. We note however that the site is generally covered with a mantle of eolian sand, or active or plowed agricultural fields that may conceal underlying cracks or fissures.

8. CONCLUSIONS

Based on our the results of our study, it is our opinion that construction of the proposed Blythe Mesa Solar Project is feasible from a geologic standpoint provided that the recommendations of this report are incorporated into the preliminary design of the project. Prior to final project design, additional subsurface geotechnical evaluation should be performed to further evaluate site-specific geotechnical conditions.

9. RECOMMENDATIONS

The potential geologic and seismic impacts that may affect the Blythe Mesa Solar Project may be mitigated by employing sound engineering practice in the planning, design and construction of the new improvements proposed for the project. This practice includes performance of the following general and specific techniques as part of the design and construction of the subject project.

9.1. Strong Ground Motion

Site-specific evaluation of the potential ground-shaking hazard for the proposed project would be performed prior to final design and construction so that appropriate structural design and mitigation techniques can be implemented. This evaluation would involve the use of geotechnical software programs utilizing site latitudinal and longitudinal coordinates and general site geologic information to evaluate the potential levels of ground shaking at the project site. Where deemed appropriate during project design, site-specific geotechnical evaluations to assess the subsurface characteristics of the on-site earth materials with regard to ground shaking could be performed. Subsurface data could be obtained through exploratory excavations and laboratory testing of soils.

Mitigation of the potential impacts of seismic ground shaking can be achieved through project design. During the design phase, site-specific geotechnical evaluations would be performed to analyze the site-specific ground motion anticipated for the improvements. Site-specific evaluation of the potential ground shaking hazard would involve an evaluation to develop seismic design parameters for use by the project structural engineer. Structural elements can then be designed to resist or accommodate appropriate site-specific ground motions and to conform to the current seismic design standards.

9.2. Ground Surface Rupture

Based on the review of the referenced fault location maps, aerial photo review, and site reconnaissance, there are no known active faults underlying the proposed project site. Accordingly, the potential for surface rupture and lurching or cracking of the ground surface as a result of a nearby seismic event is considered low. However, should future data suggest

the presence of active faulting at the project site, a fault evaluation may be performed. Such an evaluation may include review of geologic and fault location maps, a geologic reconnaissance to observe the earth units and geomorphology, and performance of a subsurface exploration to evaluate fault locations and conditions. Subsurface exploration might include the excavation and detailed logging of exploratory trenches and/or borings, geophysical studies such as high resolution seismic reflection, seismic refraction, ground penetrating radar, gravity and/or magnetic profiling or other applicable methods.

Recommendations for mitigation of potential fault rupture hazard would typically include locating improvements away from the trace of an active fault, designing structures for an acceptable amount of movement, or implementing systems to maintain safety and that allow for displacement that could be repaired.

9.3. Liquefaction and Seismically Induced Settlement

Liquefaction is the phenomenon in which loosely deposited granular soils and non-plastic silts located below the water table undergo rapid loss of shear strength when subjected to strong earthquake-induced ground shaking. Ground shaking of sufficient duration results in the loss of grain-to-grain contact due to a rapid rise in pore water pressure, and causes the soil to behave as a fluid for a short period of time. Liquefaction is known generally to occur in saturated or near-saturated cohesionless soils at depths shallower than 50 feet below ground surface. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

Based on our borings at the site, groundwater is at a depth greater than 50 feet. Therefore, liquefaction is not a design consideration. However, liquefaction should be re-evaluated when additional subsurface geotechnical evaluation is performed prior to final design. In general, mitigation for construction in liquefaction zones may include in-situ ground modification, removal of liquefiable layers and replacement with compacted fill, or support of project improvements with piles at depths designed to mitigate damage from liquefaction.

9.4. Landsliding

The subject site is located on relatively flat terrain that is not subject to landslides. The background review did not indicate the presence of landslides on or near to the subject property. Therefore, potential for landslides is not a design consideration. Accordingly, no recommendations pertaining to this issue are warranted.

9.5. Flood Hazard

To evaluate the potential for flooding, additional review of available data including a detailed hydrologic evaluation could be performed to assess the risks and potential effects of flooding. An evaluation of the flood hazard potential would be performed prior to final design and construction.

Measures to mitigate the potential for flooding may include raising the elevation of the proposed site improvements to keep them elevated above the potential flood level, and construction of berms, levees, and drainage channels.

9.6. Settlement

As noted, the underlying alluvium is expected to consist of loose to dense layers of silty sands, sands, and gravel. The soil encountered in our borings in the upper 2.5 feet has been plowed and disturbed and is in a loose condition. In boring B-2 loose material was encountered to a depth of approximately 7.5 feet. Materials below these depths were found to be medium dense or denser. Accordingly, some settlement of the loose soils underlying the near surface is possible.

Examples of possible mitigation for loose soils with potential for settlement include removal of the loose soil layers and replacement with compacted fill or specialized foundation design including the use of deep foundation systems to support structures.

9.7. Hydro-consolidation or Soil Collapse

Hydro-consolidation or Soil Collapse typically occurs in recently deposited, Holocene (less than 10,000 years old) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with man-made fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. These soils typically contain minute pores and voids. The soil particles may be supported by clay or silt, or chemically cemented with carbonates. When saturated, collapsible soils undergo rearrangement of their grains, and the water removes the cohesive (or cementing) material, this results in rapid substantial settlement (Riverside County Integrated Project).

Based on our subsurface exploration and laboratory testing data, the hydro-consolidation potential of the soils is low. However, additional hydro-consolidation tests should be performed to verify this during the design stages of the project. The mitigation recommendations for hydro-consolidation may include removal of the collapsible soil layers and replacement with compacted fill or specialized foundation design including the use of deep foundation systems to support structures.

9.8. Expansive Soils

Based on a review of regional geologic maps and our subsurface exploration, the deposits underlying the project site consist of relatively granular alluvial deposits. It is expected that grading recommendations would likely be specified as granular. Therefore, the potential for near-surface expansive soils at the project is considered low.

However, further evaluation of the potential for expansive soils to affect the proposed project components should be performed prior to final design and construction so that, in the event the hazard exists, mitigation techniques can be implemented. Mitigation for expansive soils may include techniques such as overexcavation and replacement with non-expansive soil, moisture control, and/or specific structural design for expansive soil conditions developed during design of the project.

9.9. Erosion

Construction for the proposed project is anticipated to create the potential for soil erosion during excavation, grading, and trenching activities. With the implementation of prudent site practices during construction, water and wind related soil erosion can be reduced within construction site boundaries. Such procedures may include appropriate surface drainage measures for erosion due to water, the use of erosion prevention mats or geofabrics, silt fencing, sandbags and plastic sheeting, and temporary drainage devices. Positive surface drainage should be developed and maintained at project construction sites to provide surface runoff to flow away from site improvements, slope faces or other areas susceptible to erosion.

As discussed previously, the site soils will be subject to wind erosion. To mitigate wind-related erosion, wetting of soil surfaces and/or covering exposed ground areas and soil stockpiles could be considered during construction operations, as appropriate. In addition, the use of tackifiers may be considered to reduce the potential for water- and wind-related soil erosion.

Long-term erosion potential can be mitigated through prudent site design and maintenance practices. Design procedures can be performed to reduce soil erosion such as appropriate surface drainage and design of roadways to provide for positive surface runoff. Design would address reducing concentrated run-off conditions that could cause erosion rilling and affect the stability of project improvements. The use of erosion control fabrics and roadway drainage devices can be designed and maintained to reduce erosion processes. As appropriate, a Storm Water Pollution Prevention Plan that would include the use of Best Management Practices should be developed for the construction site.

9.10. Regional Subsidence

Subsidence is characterized as the sudden or gradual downward settling of the ground surface relative to surrounding areas, and generally occurs where deep alluvial deposits are present in valley areas. Based on our review of Riverside County Integrated Project Subsidence Zone map (Figure S-7), the project area is located in a “Susceptible Area” with regard to potential subsidence. However, our review of Figure S-7 indicates the site is located outside of “Areas of Documented Subsidence”.

If additional data should become available regarding the potential for subsidence and/or the presence of earth fissures underlying the proposed project area, a geologic evaluation should be performed. Such an evaluation would include review of geologic and topographic maps, performance of a geologic reconnaissance to observe and map the geomorphology, review of groundwater well records and well pumping history, and performance of a subsurface exploration to evaluate possible fissures concealed by eolian or other surficial sediments. A subsurface evaluation might include the excavation and detailed logging of exploratory trenches and/or borings, geophysical studies such as high resolution seismic reflection, seismic refraction, ground penetrating radar, gravity and/or magnetic profiling or other applicable methods.

Mitigation of potential subsidence and earth fissure hazard would typically include locating improvements away from the trace of an active fissure, designing structures for an acceptable amount of movement, minimization of groundwater pumping to allow recovery of water table levels at or above historic levels, or implementing systems to allow for displacement that could be repaired.

9.11. Corrosion

Laboratory testing was performed on a representative sample of the on-site earth materials to evaluate pH and electrical resistivity, as well as chloride and sulfate contents. The pH and electrical resistivity tests were performed in accordance with California Test (CT) 643 and the sulfate and chloride content tests were performed in accordance with CT 417 and CT 422, respectively. These laboratory test results are presented in Appendix C.

The results of the corrosivity testing indicated an electrical resistivity of 660 ohm-cm, a soil pH of 8.5, a chloride content of 390 parts per million (ppm) and a sulfate content of 0.029 percent (i.e., 290 ppm). Based on the Caltrans corrosion (2012) criteria and ACI 318 the on-site soils would be classified as corrosive. Corrosive soils are defined as the soils with electrical resistivities less than 1,000 ohm-cm, more than 500 ppm chlorides, more than 0.1 percent sulfates, or a pH less than 5.5. Mitigation recommendations for corrosive soils would typically include designing the structural elements to resist corrosion.

10. LIMITATIONS

This report was prepared to evaluate geologic site constraints in support of the environment impact document. Prior to design, a site specific geotechnical evaluation should be performed which includes subsurface exploration. The field evaluation, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. If geotechnical conditions different from those described in this report are encountered, our office should be notified, and additional recommendations, if warranted, will be provided upon request. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no controls.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

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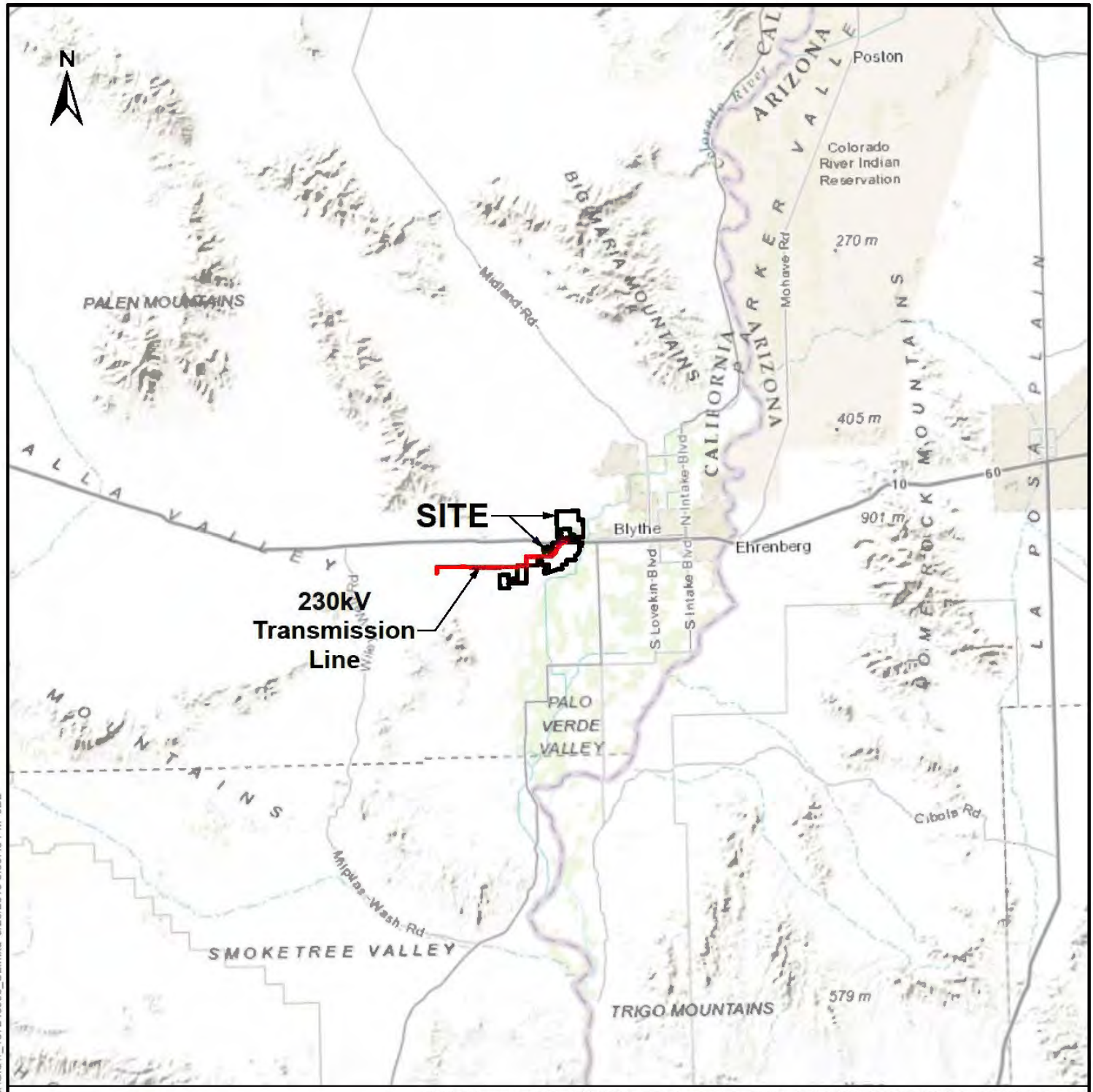
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AERIAL PHOTOGRAPHS				
Source	**Date**	**Flight**	**Numbers**	**Scale**
USDA	6-9-1959	AXM 9W	79, 80, 81, 82	1:20,000
USDA	7-23-1959	AXM 9W	154, 155	1:20,000
USDA	9-7-1959	AXM 13W	3, 4, 5, 6	1:20,000
USDA	9-7-1959	AXM 13W	68, 69	1:20,000



SOURCE: Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

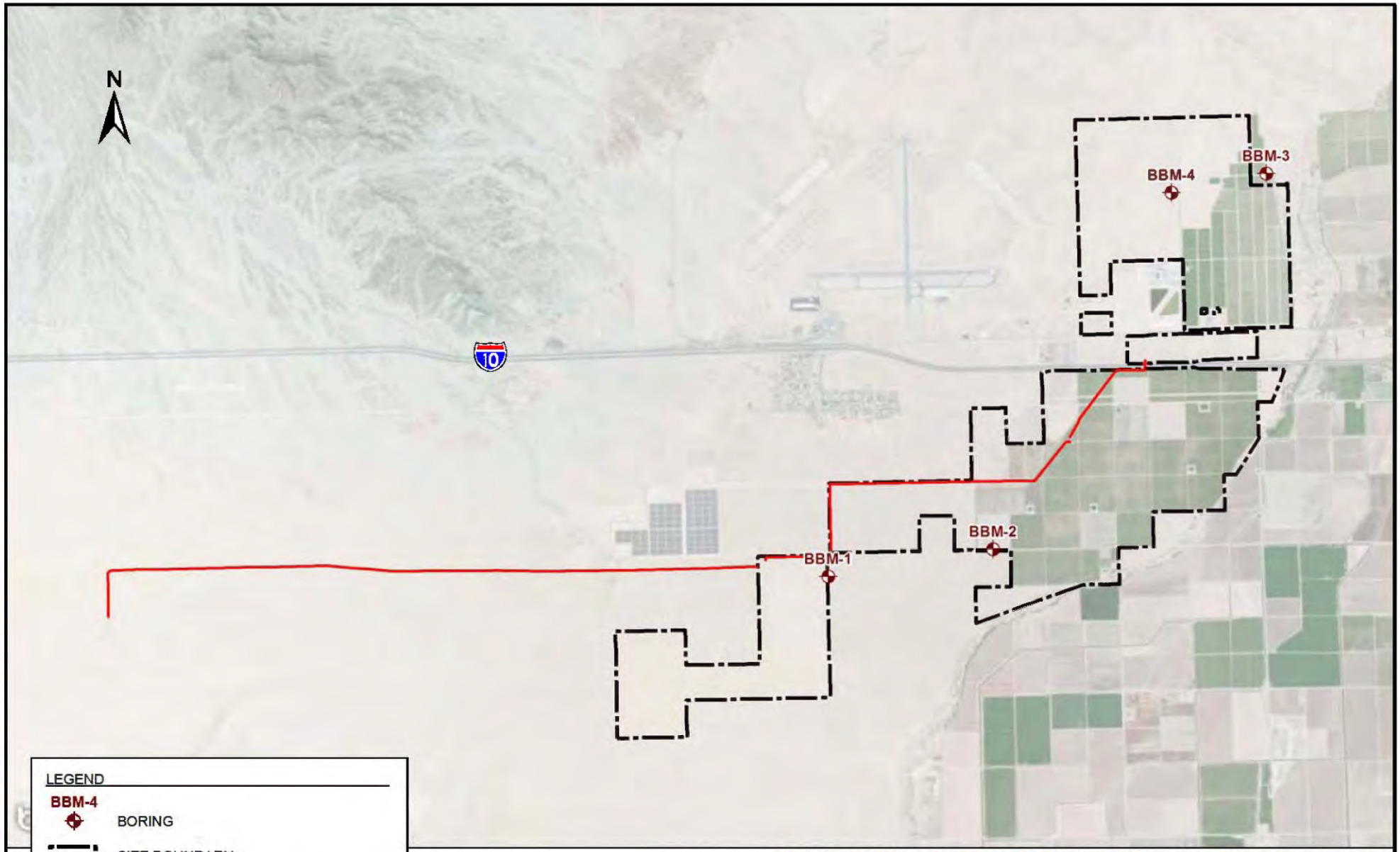
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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO. 107243003 / DATE 6/13	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	1

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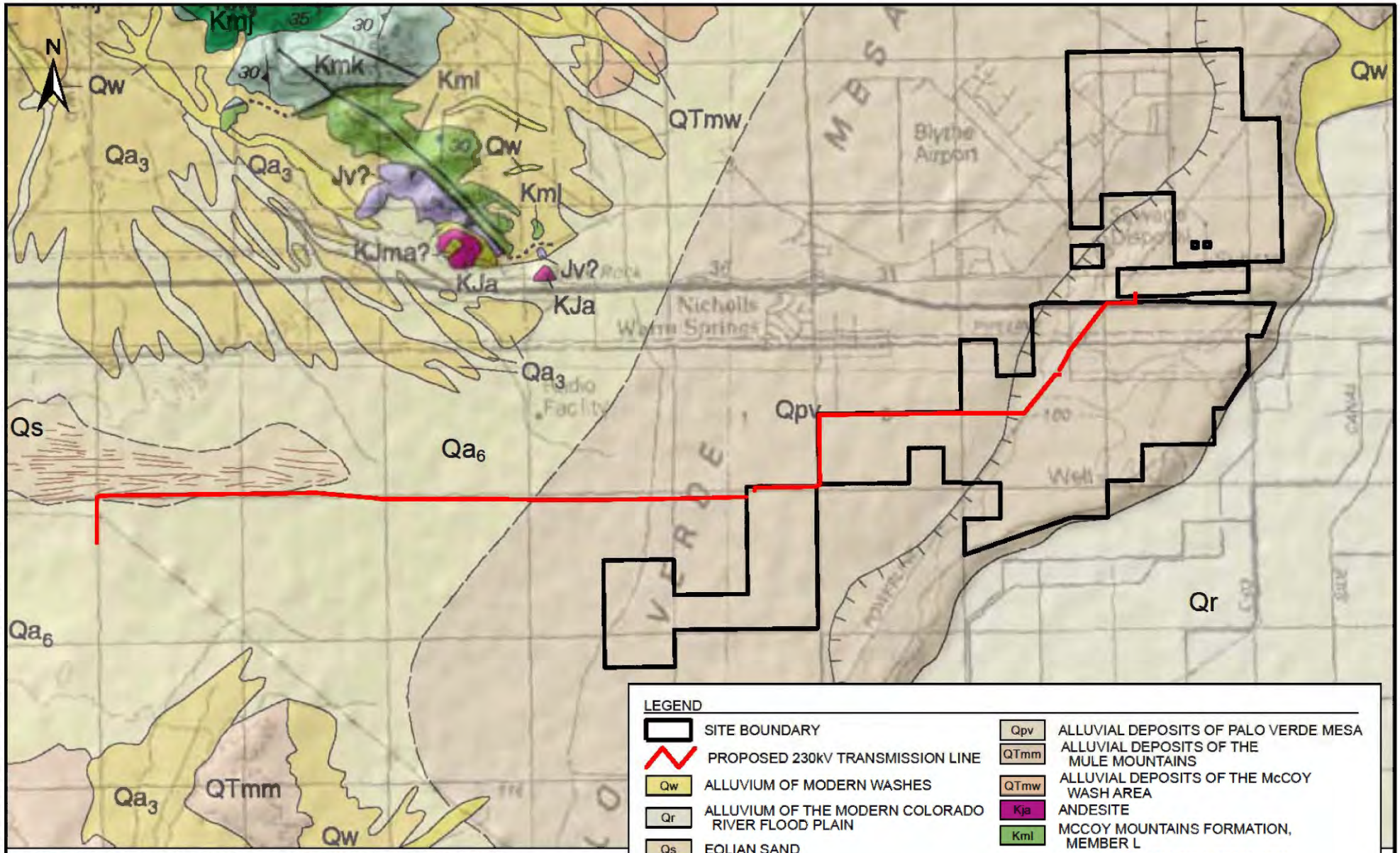
NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

SCALE IN FEET

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Ninyo & Moore		BORING LOCATIONS	FIGURE
PROJECT NO.	DATE	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	2
107243003	6/13		

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SOURCE: STONE, P., 2006., GEOLOGIC MAP OF THE WEST HALF OF THE BLYTHE 30' BY 60' QUADRANGLE, RIVERSIDE COUNTY, CALIFORNIA, AND LA PAZ COUNTY, ARIZONA

LEGEND

- SITE BOUNDARY
- PROPOSED 230kV TRANSMISSION LINE
- Qw — ALLUVIUM OF MODERN WASHES
- Qr — ALLUVIUM OF THE MODERN COLORADO RIVER FLOOD PLAIN
- Qs — EOLIAN SAND
- Qa_6 — ALLUVIAL-FAN AND ALLUVIAL-VALLEY DEPOSITS, UNIT 6
- Qa_3 — ALLUVIAL-FAN AND ALLUVIAL-VALLEY DEPOSITS, UNIT 3
- Qpv — ALLUVIAL DEPOSITS OF PALO VERDE MESA
- QTmm — ALLUVIAL DEPOSITS OF THE MULE MOUNTAINS
- QTmw — ALLUVIAL DEPOSITS OF THE McCOY WASH AREA
- Kja — ANDESITE
- Kml — MCCOY MOUNTAINS FORMATION, MEMBER L
- Kmj — MCCOY MOUNTAINS FORMATION, MEMBER J
- Kjma — MCCOY MOUNTAINS FORMATION, MEMBER A
- Jv — VOLCANIC ROCKS

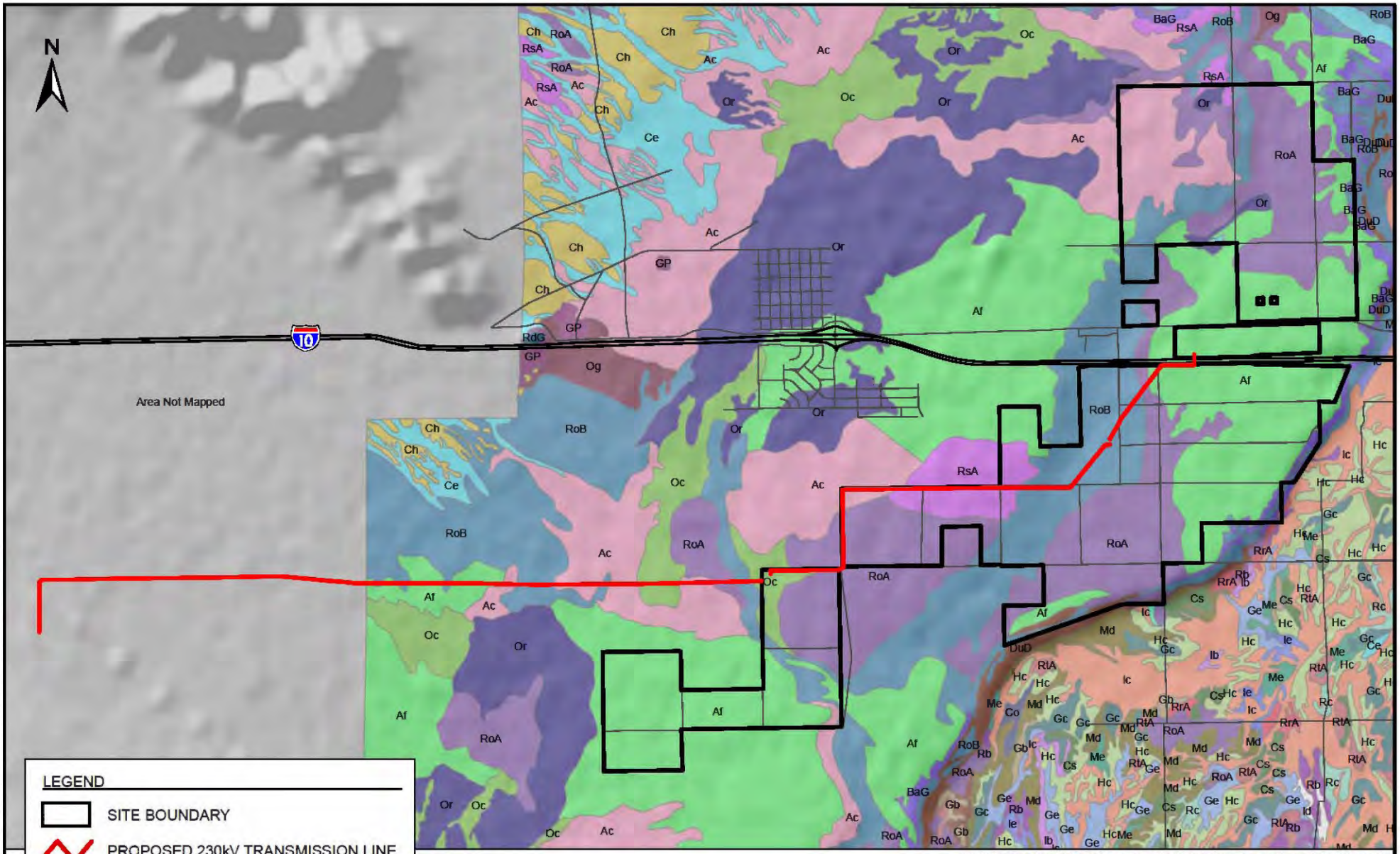
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NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore		GEOLOGY	FIGURE
PROJECT NO.	DATE	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	3
107243003	6/13		

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SOURCE: Soils - Non-MLRA Soil Survey Area CA681, Palo Verde Area, California, 154500, Davis, CA, Detailed Soil Map Legend - Natural Resources Conservation Service 24000 10/01/1968, 14139

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore		SOILS	FIGURE
PROJECT NO.	DATE	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	4
107243003	6/13		

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LEGEND

NRCS SOILS (MU SYMBOL | DESCRIPTION)

- Ac - ACO GRAVELLY LOAMY SAND
- Af - ACO SANDY LOAM
- BaG - BADLAND
- Ce - CARRIZO GRAVELLY SAND
- Ch - CHUCKAWALLA VERY GRAVELLY SILT LOAM
- Co - CIBOLA FINE SANDY LOAM
- Cs - CIBOLA SILTY CLAY LOAM
- DuD - DUNELAND
- GP - GRAVEL PITS
- Gb - GILMAN FINE SANDY LOAM
- Gc - GILMAN SILTY CLAY LOAM
- Ge - GLENBAR SILTY CLAY LOAM
- Hb - HOLTVILLE FINE SANDY LOAM
- Hc - HOLTVILLE SILTY CLAY
- Ib - IMPERIAL FINE SANDY LOAM
- Ic - IMPERIAL SILTY CLAY
- Ie - INDIO SILTY CLAY LOAM
- Md - MELOLAND FINE SANDY LOAM
- Me - MELOLAND SILTY CLAY LOAM
- Oc - ORITA FINE SAND
- Og - ORITA GRAVELLY LOAMY SAND
- Or - ORITA GRAVELLY FINE SANDY LOAM
- Rb - RIPLEY VERY FINE SANDY LOAM
- Rc - RIPLEY SILTY CLAY LOAM
- RdG - ROCK LAND
- RoA - ROSITAS FINE SAND, 0 TO 2 PERCENT SLOPES
- RoB - ROSITAS FINE SAND, 2 TO 9 PERCENT SLOPES
- RrA - ROSITAS FINE SAND, WET, 0 TO 2 PERCENT SLOPES
- RsA - ROSITAS GRAVELLY LOAMY SAND, 0 TO 2 PERCENT SLOPES
- RtA - ROSITAS SILTY CLAY LOAM, 0 TO 2 PERCENT SLOPES
- NO DATA

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

SOURCE: Soils - Non-MLRA Soil Survey Area CA681, Palo Verde Area, California, 154500, Davis, CA, Detailed Soil Map Legend - Natural Resources Conservation Service 24000 10/01/1968, 14139

Ninyo & Moore	REGIONAL SOILS LEGEND	FIGURE
PROJECT NO. 107243003 / DATE 6/13	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	4A

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LEGEND

NRCS SOILS (MU SYMBOL | LEP | CONCRETE/STEEL CORROSION LEVEL | DESCRIPTION)

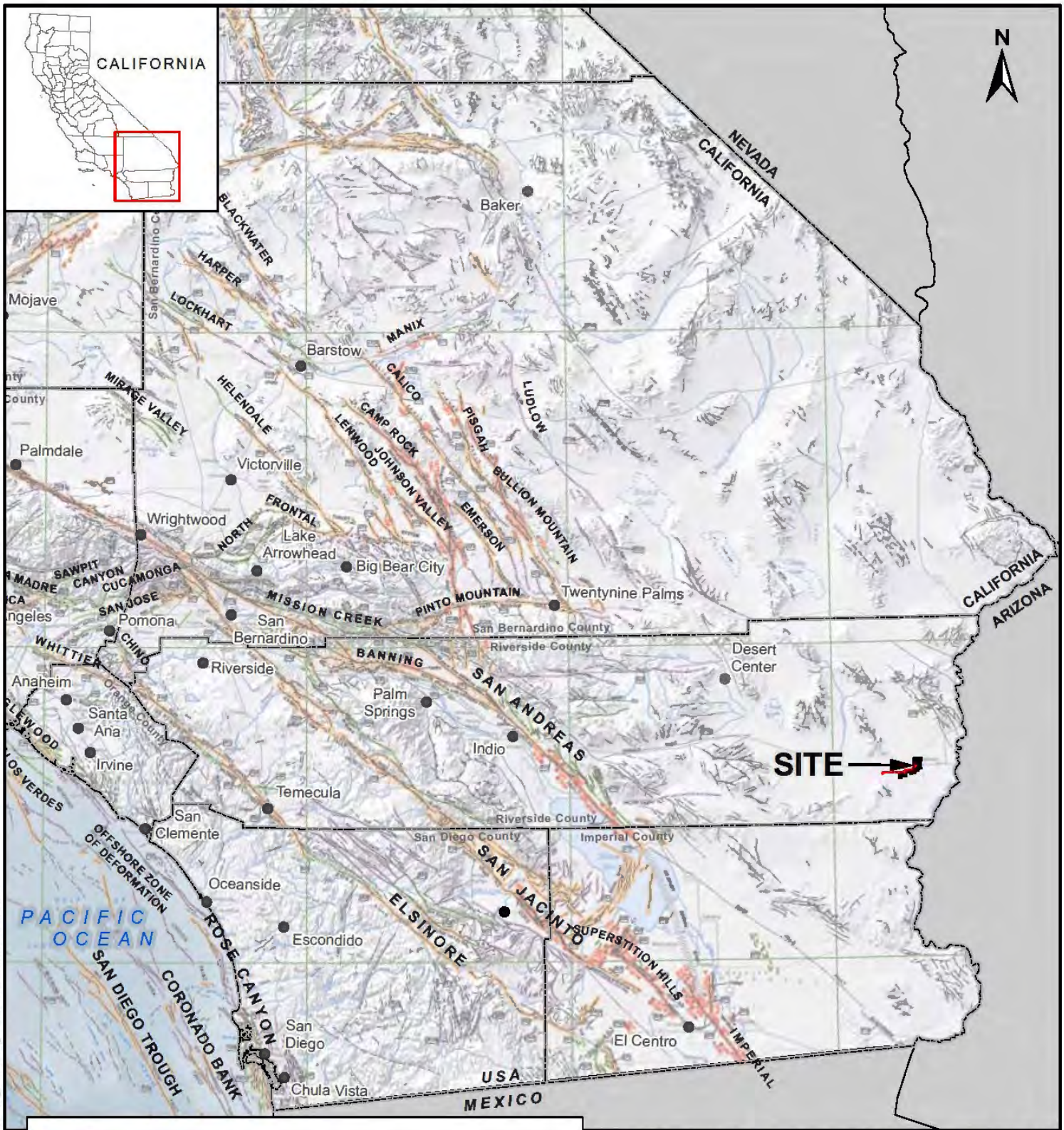
- Af - NA | MODERATE/HIGH | ACO SANDY LOAM
- BaG - NA | NA/NA | BADLAND
- Ce - NA | LOW/HIGH | CARRIZO GRAVELLY SAND
- Cs - NA | LOW/HIGH | CIBOLA SILTY CLAY LOAM
- DuD - NA | NA/NA | DUNELAND
- Hb - 7.5% | LOW/HIGH | HOLTVILLE FINE SANDY LOAM
- Hc - 7.5% | LOW/HIGH | HOLTVILLE SILTY CLAY
- Ic - 7.5% | MODERATE/HIGH | IMPERIAL SILTY CLAY
- Md - 7.5% | MODERATE/HIGH | MELOLAND FINE SANDY LOAM
- Oc - 7.5% | LOW/HIGH | ORITA FINE SAND
- Or - 7.5% | LOW/HIGH | ORITA GRAVELLY FINE SANDY LOAM
- Rb - NA | LOW/HIGH | RIPLEY VERY FINE SANDY LOAM
- RoA - NA | LOW/HIGH | ROSITAS FINE SAND, 0 TO 2 PERCENT SLOPES
- RoB - NA | LOW/HIGH | ROSITAS FINE SAND, 2 TO 9 PERCENT SLOPES
- RrA - 7.5% | LOW/HIGH | ROSITAS FINE SAND, WET, 0 TO 2 PERCENT SLOPES
- RsA - NA | LOW/HIGH | ROSITAS GRAVELLY LOAMY SAND, 0 TO 2 PERCENT SLOPES
- NO DATA

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

SOURCE: Soils - Non-MLRA Soil Survey Area CA681, Palo Verde Area, California, 154500, Davis, CA, Detailed Soil Map Legend - Natural Resources Conservation Service 24000 10/01/1968, 14139

Ninyo & Moore	IMPACTED SOILS LEGEND	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	4B
107243003 / 6/13		

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LEGEND

CALIFORNIA FAULT ACTIVITY

- HISTORICALLY ACTIVE
- HOLOCENE ACTIVE
- LATE QUATERNARY (POTENTIALLY ACTIVE)
- QUATERNARY (POTENTIALLY ACTIVE)
- STATE/COUNTY BOUNDARY

SOURCE: Fault Activity Map of California, 2010, Jennings, C.W., and Bryant, W.A., California Geological Survey.

SCALE IN MILES

0 30 60

NOTE: DIRECTIONS, DIMENSIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	FAULT LOCATIONS	FIGURE
PROJECT NO. 107243003 / DATE 6/13	BLYTHE MESA SOLAR PROJECT BLYTHE, CALIFORNIA	5

J:\Projects\100000_SD\107200_107249\107243003_Blythe_Mesa_Solar\GIS\5_107243003_FL.mxd 5/20/2013 6:08:41 PM JDL

APPENDIX A

SITE PHOTOGRAPHS



Photograph 1: **Soils and sparse vegetation on site.**



Photograph 2: **Close-up of soils on site.**



Photograph 3: **Access road on site.**



Photograph 4: **View of typical low dunes and vegetation on site.**



Photograph 5: **Low dunes and sparse vegetation on site.**



Photograph 6: **Low dunes and sparse vegetation on site.**



Photograph 7: **Agricultural field on site.**



Photograph 8: **Agricultural field on site.**

APPENDIX B

BORING LOGS

Field Procedure for the Collection of Disturbed Samples

Disturbed soil samples were obtained in the field using the following methods.

Bulk Samples

Bulk samples of representative earth materials were obtained from the exploratory borings. The samples were bagged and transported to the laboratory for testing.

The Standard Penetration Test (SPT) Sampler

Disturbed drive samples of earth materials were obtained by means of a Standard Penetration Test sampler. The sampler is composed of a split barrel with an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The sampler was driven into the ground 12 to 18 inches with a 140-pound hammer free-falling from a height of 30 inches in general accordance with ASTM D 1586. The blow counts were recorded for every 6 inches of penetration; the blow counts reported on the logs are those for the last 12 inches of penetration. Soil samples were observed and removed from the sampler, bagged, sealed and transported to the laboratory for testing.

Field Procedure for the Collection of Relatively Undisturbed Samples

Relatively undisturbed soil samples were obtained in the field using the following methods.

The Modified Split-Barrel Drive Sampler

The sampler, with an external diameter of 3.0 inches, was lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sample barrel was driven into the ground with the weight of a hammer in general accordance with ASTM D 3550. The driving weight was permitted to fall freely. The approximate length of the fall, the weight of the hammer, and the number of blows per foot of driving are presented on the boring logs as an index to the relative resistance of the materials sampled. The samples were removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

BORING LOG EXPLANATION SHEET

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	
0	■							Bulk sample.
		■						Modified split-barrel drive sampler.
		⊠						No recovery with modified split-barrel drive sampler.
		▬						Sample retained by others.
		◥						Standard Penetration Test (SPT).
5		◺						No recovery with a SPT.
		▯	XX/XX					Shelby tube sample. Distance pushed in inches/length of sample recovered in inches.
		◹						No recovery with Shelby tube sampler.
		▯						Continuous Push Sample.
				♀				Seepage.
10				▽				Groundwater encountered during drilling.
				▼				Groundwater measured after drilling.
						▨	SM	MAJOR MATERIAL TYPE (SOIL): Solid line denotes unit change.
						▨	CL	Dashed line denotes material change.
						▨		Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Shear Bedding Surface
15						▨		
						▨		
						▨		
						▨		
						▨		
						▨		
						▨		
						▨		
						▨		
20						▨		The total depth line is a solid line that is drawn at the bottom of the boring.

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BORING LOG

Explanation of Boring Log Symbols

PROJECT NO.	DATE	FIGURE
	Rev. 11/11	

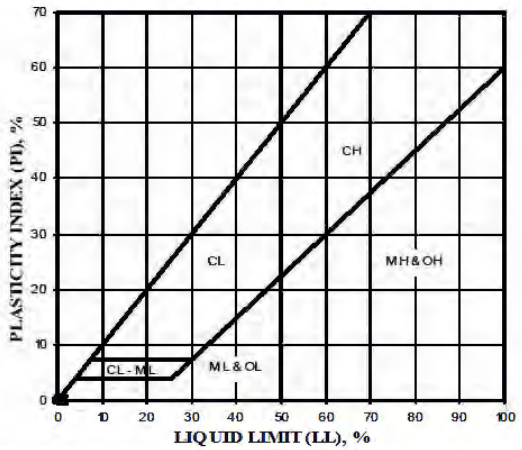
U.S.C.S. METHOD OF SOIL CLASSIFICATION

MAJOR DIVISIONS		SYMBOL	TYPICAL NAMES
COARSE-GRAINED SOILS (More than 1/2 of soil > No. 200 Sieve Size)	GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size	GW	Well graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS (More than 1/2 of coarse fraction < No. 4 sieve size	SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (More than 1/2 of soil < No. 200 sieve size)	SILTS & CLAYS Liquid Limit <50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS Liquid Limit >50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

GRAIN SIZE CHART

CLASSIFICATION	RANGE OF GRAIN	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	306 to 76.2
GRAVEL	3" to No. 4	76.2 to 4.76
Coarse	3" to 3/4"	76.2 to 19.1
Fine	3/4" to No. 4	19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.075
Coarse	No. 4 to No. 10	4.76 to 2.00
Medium	No. 10 to No. 40	2.00 to 0.420
Fine	No. 40 to No. 200	0.420 to 0.075
SILT & CLAY	Below No. 200	Below 0.075

PLASTICITY CHART



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U.S.C.S. METHOD OF SOIL CLASSIFICATION

Updated Nov. 2011

DATE DRILLED 5/14/13 BORING NO. B-1

GROUND ELEVATION 390' ± (MSL) SHEET 1 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						SM	AGRICULTURAL SOIL: Brown, damp, medium dense, silty SAND.
5		21	1.4	108.7		SM	ALLUVIUM: Brown, dry to damp, medium dense, silty SAND.
10		27				SP	Light brown, dry to damp, medium dense, poorly graded SAND.
15		40	0.7	97.8			
20							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-1

DATE DRILLED 5/14/13 BORING NO. B-1

GROUND ELEVATION 390' ± (MSL) SHEET 2 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20		56				SP	ALLUVIUM: (Continued) Light brown, damp, dense, poorly graded SAND.
							Total Depth = 21.5 feet. Groundwater not encountered during drilling. Backfilled with bentonite and soil shortly after drilling on 5/14/13. Note: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25							
30							
35							
40							

Ninyo & Moore

BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-2

DATE DRILLED 5/14/13 BORING NO. B-2

GROUND ELEVATION 325' ± (MSL) SHEET 1 OF 3

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						SM	AGRICULTURAL SOIL: Brown, dry to damp, loose, silty SAND.
5		13				SM	ALLUVIUM: Brown, damp, loose, silty SAND. Scattered gravel.
10		33	1.3	113.8		SP	Light grayish brown, damp, medium dense, poorly-graded SAND.
15		39					
20							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-3

DATE DRILLED 5/14/13 BORING NO. B-2

GROUND ELEVATION 325' ± (MSL) SHEET 2 OF 3

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20		29	2.7	105.6		SP	ALLUVIUM: (Continued) Light grayish brown, damp, medium dense, poorly-graded SAND; scattered gravel.
						SP-SM	Light brown, damp, medium dense, poorly-graded SAND with silt.
25		14					
						SP	Light brown, damp, medium dense to dense, poorly-graded SAND.
30		20					
35		30					Dense.
40							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-4

DATE DRILLED 5/14/13 BORING NO. B-2

GROUND ELEVATION 325' ± (MSL) SHEET 3 OF 3

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
40						SP	ALLUVIUM: (Continued) Light brown, damp, medium dense to dense, poorly-graded SAND.
		20					
45		40					Very dense.
50		29					Dense.
							Total Depth = 51.5 feet. Groundwater not encountered during drilling. Backfilled with bentonite and soil shortly after drilling on 5/14/13. Note: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
55							
60							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-5

DATE DRILLED 5/14/13 BORING NO. B-3

GROUND ELEVATION 350' ± (MSL) SHEET 1 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0						SM	AGRICULTURAL SOIL: Light brown, dry to damp, medium dense, silty SAND; scattered gravel.
5		57				SM	ALLUVIUM: Light brown, dry to damp, dense, silty SAND.
10		21	20.8	95.0		ML	Brown, damp to moist, medium dense, fine sandy SILT.
15		32				SP-SM	Light brown, dry to damp, medium dense, poorly graded SAND with silt.
20							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-6

DATE DRILLED 5/14/13 BORING NO. B-3

GROUND ELEVATION 350' ± (MSL) SHEET 2 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20		26				SP-SM	ALLUVIUM: (Continued) Light brown, dry to damp, medium dense, poorly-graded SAND with silt.
							Total Depth = 21.5 feet. Groundwater not encountered during drilling. Backfilled with bentonite and soil shortly after drilling on 5/14/13. Note: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25							
30							
35							
40							

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-7

DATE DRILLED 5/14/13 BORING NO. B-4

GROUND ELEVATION 390' ± (MSL) SHEET 1 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							SW-SM	AGRICULTURAL SOIL: Light brown, dry to damp, medium dense, well-graded SAND with silt; scattered gravel.
							SW-SM	ALLUVIUM: Light brown, dry to damp, medium dense, well-graded SAND with silt; scattered gravel.
5			40	1.5			SP	Light brown, dry to damp, medium dense, poorly-graded SAND.
10			44					Dense.
15			27					Medium dense.
20								

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BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-8

DATE DRILLED 5/14/13 BORING NO. B-4

GROUND ELEVATION 390' ± (MSL) SHEET 2 OF 2

METHOD OF DRILLING 8" Diameter Hollow Stem Auger (CME-75) (Baja Exploration)

DRIVE WEIGHT 140 lbs. (Auto-Trip) DROP 30"

SAMPLED BY BTM LOGGED BY BTM REVIEWED BY FOM

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20		■	75	1.1	100.6		SP	ALLUVIUM: (Continued) Light brown, dry to damp, very dense, poorly graded SAND.
								Total Depth = 21.5 feet. Groundwater not encountered during drilling. Backfilled with bentonite and soil shortly after drilling on 5/14/13. Note: Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
35								
40								

Ninyo & Moore

BORING LOG

BLYTHE MESA SOLAR PROJECT
BLYTHE, CALIFORNIA

PROJECT NO.	DATE	FIGURE
107243003	6/13	B-9

APPENDIX C

LABORATORY TESTING

Classification

Soils were visually and texturally classified in accordance with the Unified Soil Classification System (USCS) in general accordance with ASTM D 2488. Soil classifications are indicated on the logs of the exploratory borings in Appendix B.

Moisture Content

The moisture content of a sample obtained from the exploratory boring was evaluated in accordance with ASTM D 2216. The test results are presented on the logs of the exploratory borings in Appendix B.

In-Place Moisture and Density Tests

The moisture content and dry density of relatively undisturbed samples obtained from the exploratory borings were evaluated in general accordance with ASTM D 2937. The test results are presented on the logs of the exploratory borings in Appendix B.

Gradation Analysis

Gradation analysis tests were performed on selected representative soil samples in general accordance with ASTM D 422. The grain-size distribution curves are shown on Figures C-1 and C-2. These test results were utilized in evaluating the soil classifications in accordance with the Unified Soil Classification System (USCS).

Consolidation Tests

Consolidation tests were performed on selected relatively undisturbed soil samples in general accordance with ASTM D 2435. The samples were inundated during testing to represent adverse field conditions. The percent of consolidation for each load cycle was recorded as a ratio of the amount of vertical compression to the original height of the sample. The results of the tests are summarized on Figures C-3 and C-4.

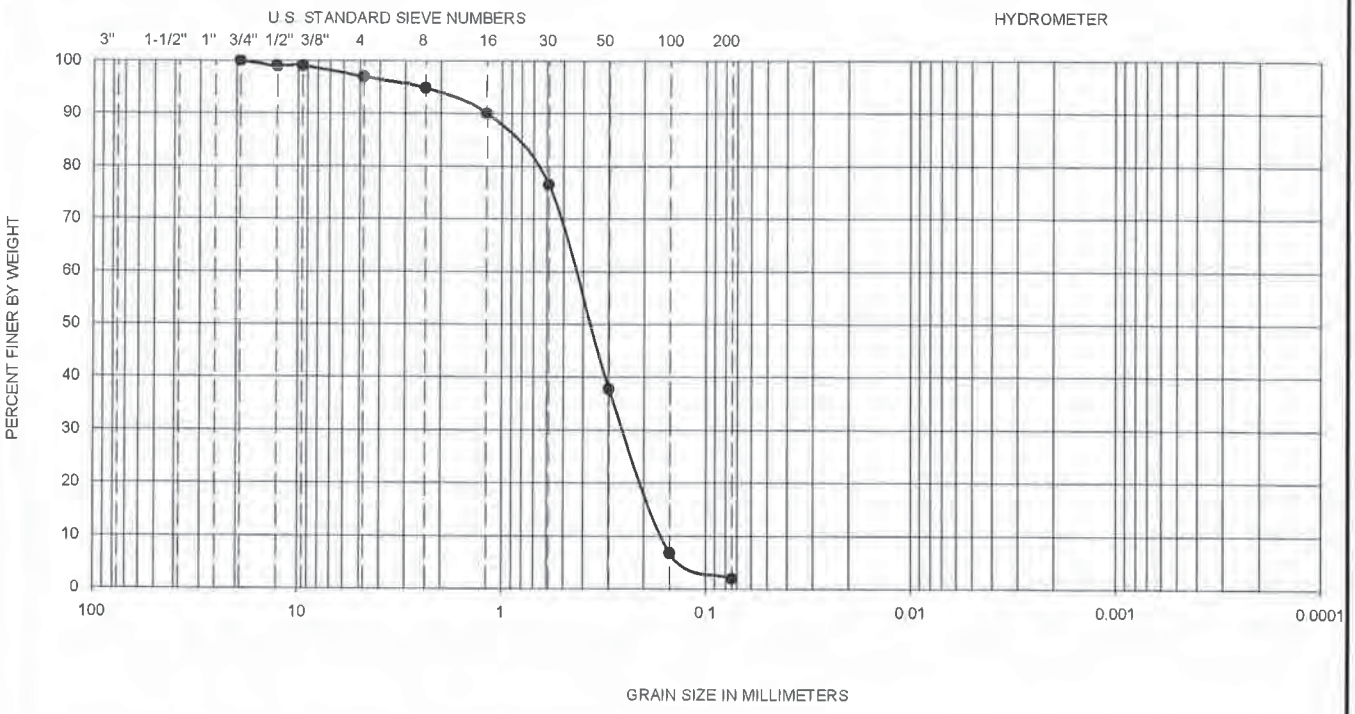
Direct Shear Tests

Direct shear tests were performed on relatively undisturbed samples in general accordance with ASTM D 3080 to evaluate the shear strength characteristics of selected materials. The samples were inundated during shearing to represent adverse field conditions. The results are shown on Figures C-5 and C-6.

Soil Corrosivity Tests

Soil pH, and resistivity tests were performed on representative samples in general accordance with California Test (CT) 643. The soluble sulfate and chloride content of selected samples were evaluated in general accordance with CT 417 and CT 422, respectively. The test results are presented on Figure C-7.

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

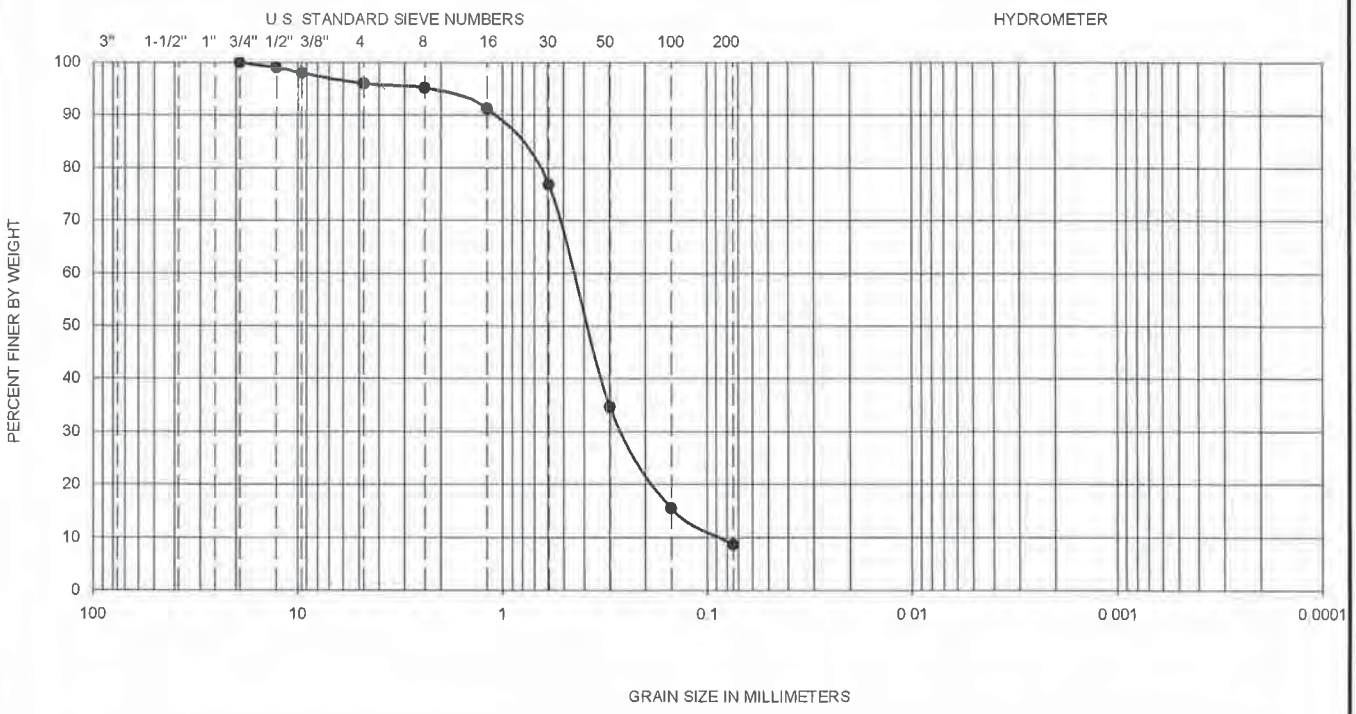


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	USCS
●	B-2	15.0-16.5	--	--	--	0.17	0.27	0.43	2.6	1.0	2	SP

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

Ninyo & Moore	GRADATION TEST RESULTS	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR BLYTHE, CALIFORNIA	C-1
107243003 / 6/13		

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay

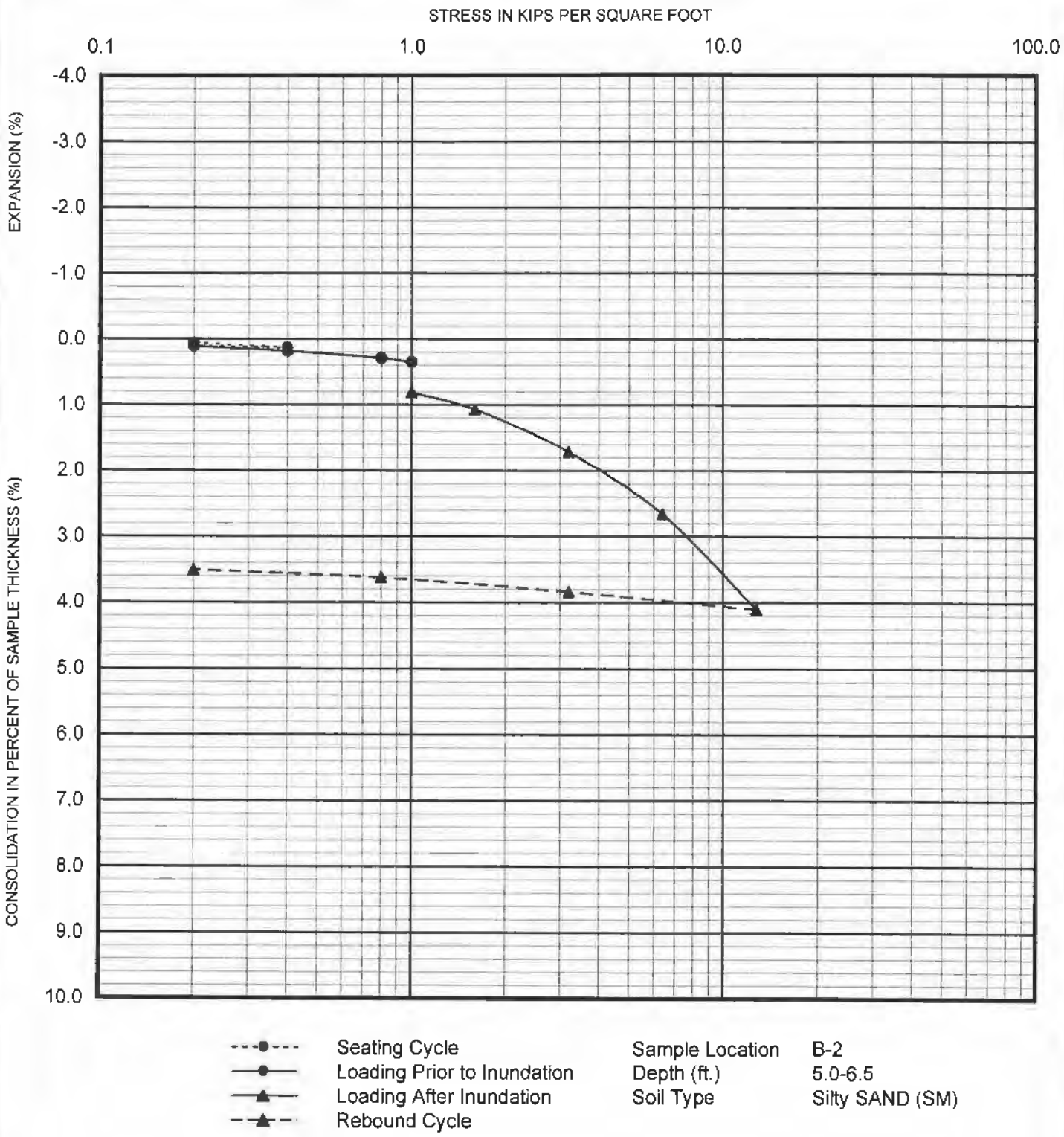


Symbol	Sample Location	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	USCS
●	B-4	0.0-5.0	--	--	--	0.09	0.28	0.45	5.1	1.9	9	SW-SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 422

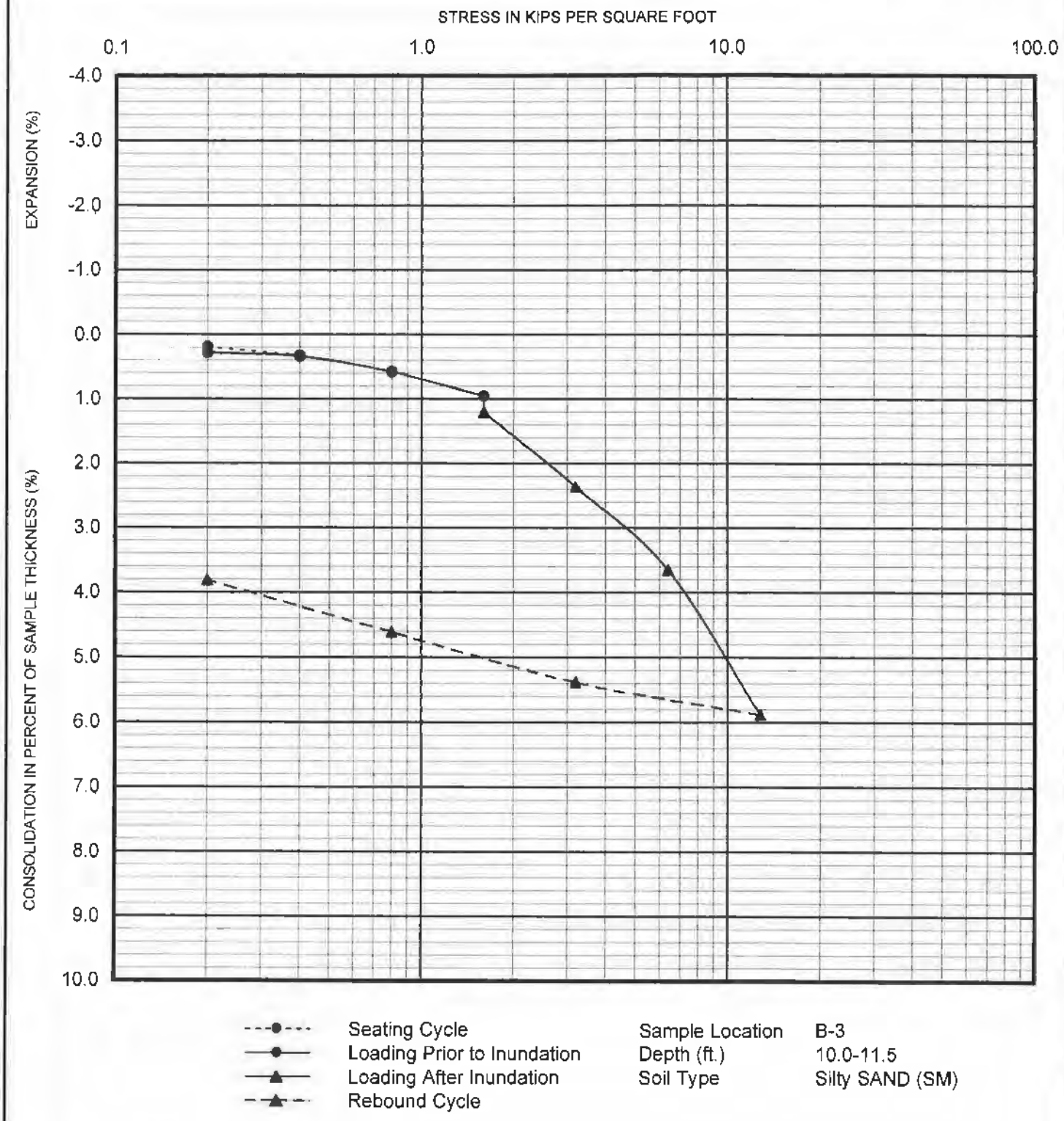
Ninyo & Moore	GRADATION TEST RESULTS	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR BLYTHE, CALIFORNIA	C-2
107243003 / 6/13		

107243003_SIEVE B-4 @ 0.0-5.0.xls



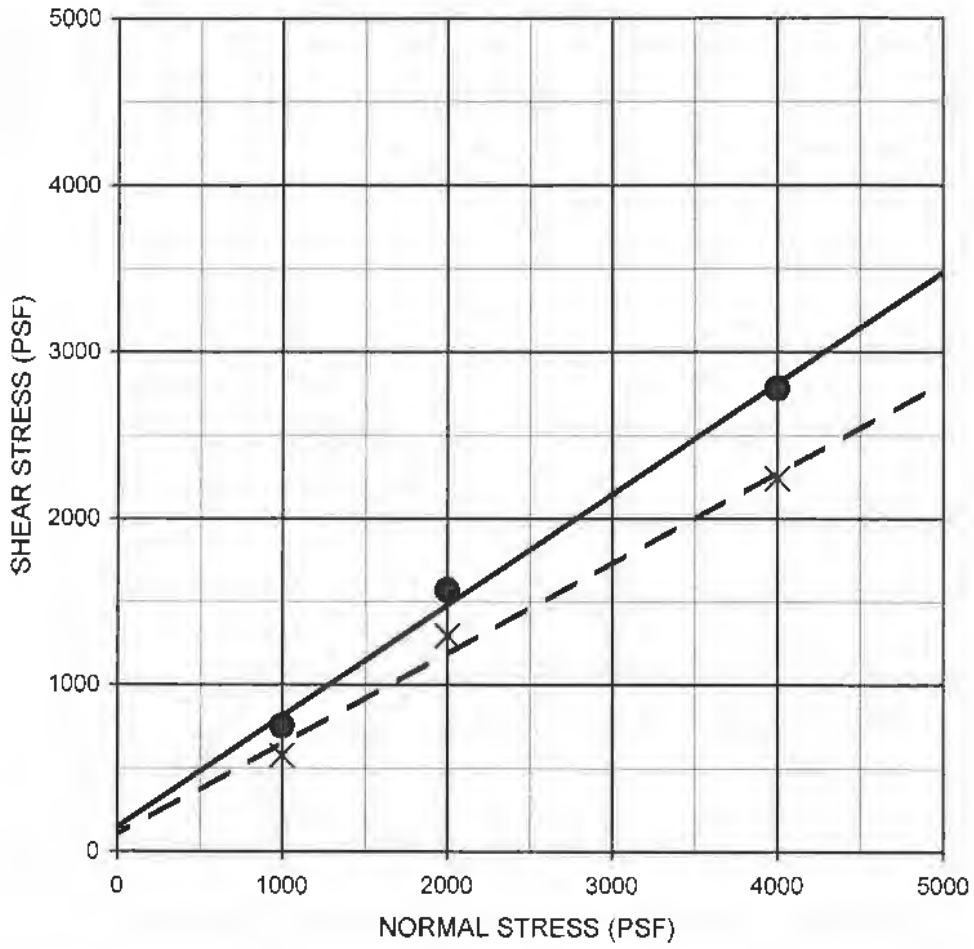
PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435

Ninyo & Moore	CONSOLIDATION TEST RESULTS	FIGURE
PROJECT NO. 107243003 / DATE 6/13	BLYTHE MESA SOLAR BLYHTE, CALIFORNIA	C-3



PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 2435

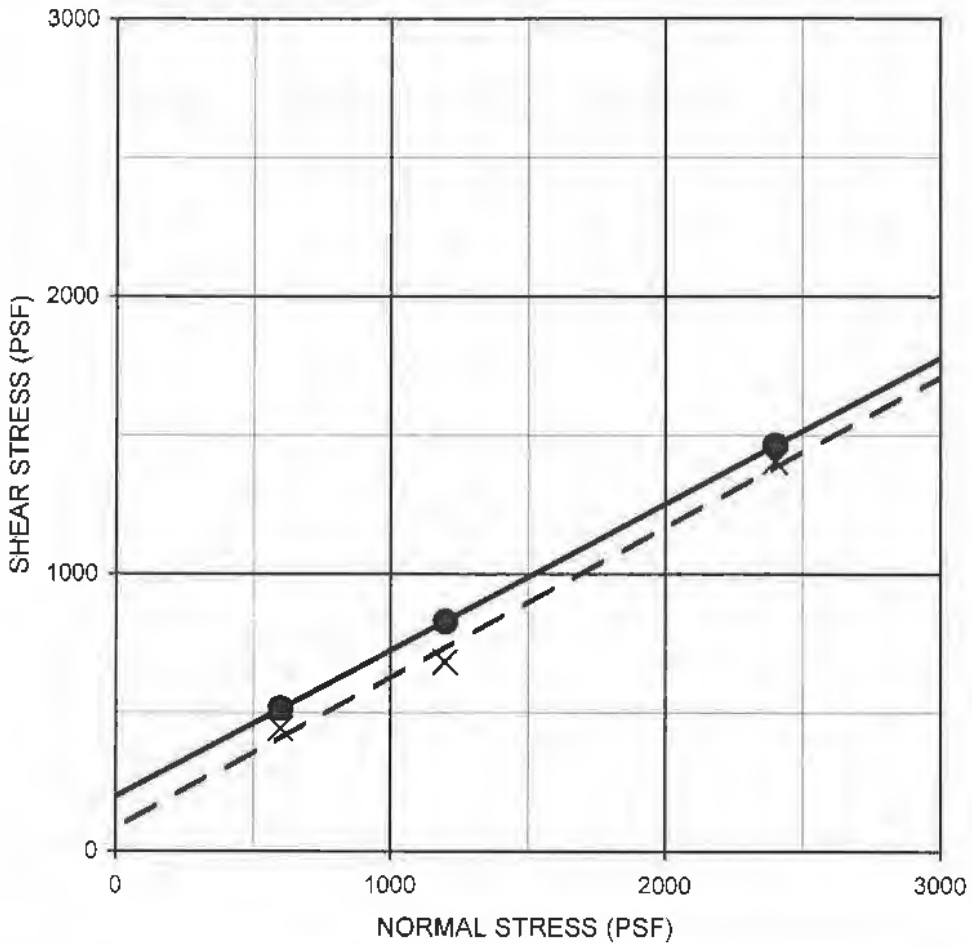
Ninyo & Moore	CONSOLIDATION TEST RESULTS	FIGURE
PROJECT NO. 107243003 / DATE 6/13	BLYTHE MESA SOLAR BLYHTE, CALIFORNIA	C-4



Description	Symbol	Sample Location	Depth (ft)	Shear Strength	Cohesion, c (psf)	Friction Angle, ϕ (degrees)	Soil Type
SAND	—●—	B-1	15.0-16.5	Peak	150	34	SP
SAND	- - X - -	B-1	15.0-16.5	Ultimate	100	29	SP

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 3080

Ninyo & Moore	DIRECT SHEAR TEST RESULTS	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR BLYTHE, CALIFORNIA	C-5
107243003 / 6/13		



Description	Symbol	Sample Location	Depth (ft)	Shear Strength	Cohesion, c (psf)	Friction Angle, ϕ (degrees)	Soil Type
Silty SAND	—●—	B-3	5.0-6.5	Peak	200	28	SM
Silty SAND	- - x - -	B-3	5.0-6.5	Ultimate	90	28	SM

PERFORMED IN GENERAL ACCORDANCE WITH ASTM D 3080

Ninyo & Moore	DIRECT SHEAR TEST RESULTS	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR BLYTHE, CALIFORNIA	C-6
107243003 / 6/13		

SAMPLE LOCATION	SAMPLE DEPTH (FT)	pH [1]	RESISTIVITY [1] (Ohm-cm)	SULFATE CONTENT [2]		CHLORIDE CONTENT [3] (ppm)
				(ppm)	(%)	
B-3	0.0-5.0	8.5	660	290	0.029	390

[1] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 643
[2] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 417
[3] PERFORMED IN GENERAL ACCORDANCE WITH CALIFORNIA TEST METHOD 422

Ninyo & Moore	CORROSIVITY TEST RESULTS	FIGURE
PROJECT NO. / DATE	BLYTHE MESA SOLAR BLYTHE, CALIFORNIA	C-7
107243003 / 6/13		

APPENDIX F
EDR DATA MAP

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Cocopah Nursery
Blythe, CA 92225

Inquiry Number: 3186188.1s
October 18, 2011

EDR DataMap™ Area Study

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

BLYTHE, CA 92225
BLYTHE, CA 92225

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
LIENS 2	CERCLA Lien Information
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
DOT OPS	Incident and Accident Data
US CDL	Clandestine Drug Labs
US BROWNFIELDS	A Listing of Brownfields Sites
DOD	Department of Defense Sites
FUDS	Formerly Used Defense Sites
LUCIS	Land Use Control Information System
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
ODI	Open Dump Inventory
MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System

RADINFO ---- Radiation Information Database
RAATS ---- RCRA Administrative Action Tracking System
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US HIST CDL ---- National Clandestine Laboratory Register
PCB TRANSFORMER ---- PCB Transformer Registration Database
FEDERAL FACILITY ---- Federal Facility Site Information listing
COAL ASH DOE ---- Sleam-Electric Plan Operation Data
FEMA UST ---- Underground Storage Tank Listing
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List

STATE AND LOCAL RECORDS

HIST Cal-Sites ---- Historical Calsites Database
CA BOND EXP. PLAN ---- Bond Expenditure Plan
SCH ---- School Property Evaluation Program
Toxic Pits ---- Toxic Pits Cleanup Act Sites
SWF/LF ---- Solid Waste Information System
WDS ---- Waste Discharge System
NPDES ---- NPDES Permits Listing
Cortese ---- "Cortese" Hazardous Waste & Substances Sites List
SWRCY ---- Recycler Database
CA FID UST ---- Facility Inventory Database
UST ---- Active UST Facilities
LIENS ---- Environmental Liens Listing
SWEEPS UST ---- SWEEPS UST Listing
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
Notify 65 ---- Proposition 65 Records
DEED ---- Deed Restriction Listing
VCP ---- Voluntary Cleanup Program Properties
DRYCLEANERS ---- Cleaner Facilities
WIP ---- Well Investigation Program Case List
CDL ---- Clandestine Drug Labs
ENF ---- Enforcement Action Listing
RESPONSE ---- State Response Sites
HAZNET ---- Facility and Manifest Data
EMI ---- Emissions Inventory Data
ENVIROSTOR ---- EnviroStor Database
HAULERS ---- Registered Waste Tire Haulers Listing
HWP ---- EnviroStor Permitted Facilities Listing
MWMP ---- Medical Waste Management Program Listing
PROC ---- Certified Processors Database
HWT ---- Registered Hazardous Waste Transporter Database

TRIBAL RECORDS

INDIAN RESERV ---- Indian Reservations
INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land
INDIAN UST ---- Underground Storage Tanks on Indian Land
INDIAN VCP ---- Voluntary Cleanup Priority Listing

EDR PROPRIETARY RECORDS

Manufactured Gas Plants ---- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL RECORDS

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/25/2011 has revealed that there are 2 CERC-NFRAP sites within the searched area.

Site	Address	Map ID	Page
FARMER AIR SERVICE	***17500 W HOBSON WAY***	***5***	***104***
WEST COAST FLYING SERVICE	***13-400 W 14TH SAVE***	***7***	***107***

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/09/2011 has revealed that there are 2 CORRACTS sites within the searched area.

Site	Address	Map ID	Page
FARMER AIR SERVICE	***17500 W HOBSON WAY***	***5***	***104***
WEST COAST FLYING SERVICE	***13-400 W 14TH SAVE***	***7***	***107***

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 06/15/2011 has revealed that there are 2 RCRA-NonGen sites within the searched area.

Site	Address	Map ID	Page
FARMER AIR SERVICE	***17500 W HOBSON WAY***	***5***	***104***
WEST COAST FLYING SERVICE	***13-400 W 14TH SAVE***	***7***	***107***

EXECUTIVE SUMMARY

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 04/14/2010 has revealed that there are 2 FINDS sites within the searched area.

Site	Address	Map ID	Page
FARMER AIR SERVICE	***17500 W HOBSON WAY***	***5***	***104***
WEST COAST FLYING SERVICE	***13-400 W 14TH SAVE***	***7***	***107***

STATE AND LOCAL RECORDS

WMUDS/SWAT: The Waste Management Unit Database System is used for program tracking and inventory of waste management units. The source is the State Water Resources Control Board.

A review of the WMUDS/SWAT list, as provided by EDR, and dated 04/01/2000 has revealed that there is 1 WMUDS/SWAT site within the searched area.

Site	Address	Map ID	Page
BLYTHE AIRPORT DUMP	***BLYTHE AIRPORT***	***2***	***3***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 3 HIST CORTESE sites within the searched area.

Site	Address	Map ID	Page
SUNWORLD #1	***15550 WEST HOBSONWAY***	***3***	***6***
BLYTHE LEMON RANCH #41	15550 HOBSONEWAY	3	102
BLYTHE AIRPORT	***17240 HOBSONWAY***	***4***	***102***

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 08/09/2011 has revealed that there are 4 LUST sites within the searched area.

Site	Address	Map ID	Page
SUNWORLD #1	***15550 WEST HOBSONWAY***	***3***	***6***

Status: Completed - Case Closed
Status: Completed - Case Closed
**Additional key fields are available in the Map Findings section*

EXECUTIVE SUMMARY

Site	Address	Map ID	Page
SUN WORLD	15550 W HOBSONWAY	3	101
SUNWORLD FACILITY Status: Completed - Case Closed	15550 EAST HOBSONWAY	3	101
BLYTHE AIRPORT Status: Completed - Case Closed	***17240 HOBSONWAY***	***4***	***102***

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 08/09/2011 has revealed that there is 1 SLIC site within the searched area.

Site	Address	Map ID	Page
WOTEN AVIATION - BLYTHE	17798 BLYTHE WAY	6	107

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within the searched area.

Site	Address	Map ID	Page
BLYTHE RCAG	BLYTHE AFSFO	2	3

CHMIRS: The California Hazardous Material Incident Report System contains information on reported hazardous material incidents, i.e., accidental releases or spills. The source is the California Office of Emergency Services.

A review of the CHMIRS list, as provided by EDR, and dated 12/31/2010 has revealed that there is 1 CHMIRS site within the searched area.

Site	Address	Map ID	Page
BLYTHE AIRPORT DUMP	***BLYTHE AIRPORT***	***2***	***3***

AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the AST list, as provided by EDR, and dated 08/01/2009 has revealed that there is 1 AST site within the searched area.

Site	Address	Map ID	Page
BLYTHE LEMON RANCH	10151 BUCK BLVD.	1	3

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

EDR DataMap® Area Study

Cocopah Nursery Update

- Listed Sites
- Earthquake Epicenters (Richter 5 or greater)
- Search Boundary
- Roads
- Major Roads
- Waterways
- Railroads
- Contour Lines
- Pipelines
- Powerlines
- Fault Lines
- Water
- Superfund Sites
- Federal DOD Sites
- Indian Reservations BIA



Blythe, CA

0 1/2 1

Scale in Miles

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MAP FINDINGS SUMMARY

Database	Total Plotted
FEDERAL RECORDS	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
CERCLIS	0
CERC-NFRAP	2
LIENS 2	0
CORRACTS	2
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	0
RCRA-NonGen	2
US ENG CONTROLS	0
US INST CONTROL	0
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	0
FUDS	0
LUCIS	0
CONSENT	0
ROD	0
UMTRA	0
DEBRIS REGION 9	0
ODI	0
MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	0
PADS	0
MLTS	0
RADINFO	0
FINDS	2
RAATS	0
SCRD DRYCLEANERS	0
US HIST CDL	0
PCB TRANSFORMER	0
FEDERAL FACILITY	0
COAL ASH DOE	0
FEMA UST	0
COAL ASH EPA	0
STATE AND LOCAL RECORDS	
HIST Cal-Sites	0

MAP FINDINGS SUMMARY

Database	Total Plotted
CA BOND EXP. PLAN	0
SCH	0
Toxic Pits	0
SWF/LF	0
WDS	0
WMUDS/SWAT	1
NPDES	0
Cortese	0
HIST CORTESE	3
SWRCY	0
LUST	4
CA FID UST	0
SLIC	1
UST	0
HIST UST	1
LIENS	0
SWEEPS UST	0
CHMIRS	1
LDS	0
MCS	0
AST	1
Notify 65	0
DEED	0
VCP	0
DRYCLEANERS	0
WIP	0
CDL	0
ENF	0
RESPONSE	0
HAZNET	0
EMI	0
ENVIROSTOR	0
HAULERS	0
HWP	0
MWMP	0
PROC	0
HWT	0

TRIBAL RECORDS

INDIAN RESERV	0
INDIAN ODI	0
INDIAN LUST	0
INDIAN UST	0
INDIAN VCP	0

EDR PROPRIETARY RECORDS

Manufactured Gas Plants	0

NOTES:

Sites may be listed in more than one database

1 **BLYTHE LEMON RANCH** AST A100339718
10151 BUCK BLVD. N/A
BLYTHE, CA 92225

AST:

Owner:	SUN WORLD INTERNATIONAL LLC
Total Gallons:	3,500
Certified Unified Program Agencies:	Riverside

---

2 **BLYTHE RCAG** HIST UST U001573612
BLYTHE AFSFO N/A
BLYTHE, CA 92225

HIST UST:

Region:	STATE
Facility ID:	00000060256
Facility Type:	Other
Other Type:	AIRCRAFT AIR/GRD COU
Total Tanks:	0001
Contact Name:	TED MILLS
Telephone:	7143516709
Owner Name:	FEDERAL AVIATION ADMINISTRATIO
Owner Address:	6961 FLIGHT RD.
Owner City,St,Zip:	RIVERSIDE, CA 92504
Tank Num:	001
Container Num:	25
Year Installed:	1975
Tank Capacity:	00000510
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Tank Construction:	12 gauge
Leak Detection:	Visual, Stock Inventor

---

2 **BLYTHE AIRPORT DUMP** WMUDS/SWAT S103320645
BLYTHE AIRPORT CHMIRS N/A
BLYTHE, CA 92225

WMUDS/SWAT:

Edit Date:	Not reported
Complexity:	Not reported
Primary Waste:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Base Meridian:	SB
NPID:	Not reported
Tonnage:	0
Regional Board ID:	Not reported
Municipal Solid Waste:	False
Superorder:	False
Open To Public:	False
Waste List:	False
Agency Type:	Not reported
Agency Name:	AIRPORTS DEPT.
Agency Department:	Not reported
Agency Address:	Not reported
Agency City,St,Zip:	Not reported

BLYTHE AIRPORT DUMP (Continued) **S103320645**

Agency Contact:	Not reported
Agency Telephone:	7147872494
Land Owner Name:	RIVERSIDE COUNTY
Land Owner Address:	PO BOX 1090
Land Owner City,St,Zip:	RIVERSIDE, CA 92501
Land Owner Contact:	Not reported
Land Owner Phone:	7147872669
Region:	7
Facility Type:	Not reported
Facility Description:	Not reported
Facility Telephone:	Not reported
SWAT Facility Name:	BLYTHE AIRPORT DUMP
Primary SIC:	Not reported
Secondary SIC:	Not reported
Comments:	Not reported
Last Facility Editors:	Not reported
Waste Discharge System:	False
Solid Waste Assessment Test Program:	True
Toxic Pits Cleanup Act Program:	False
Resource Conservation Recovery Act:	False
Department of Defence:	False
Solid Waste Assessment Test Program:	AIRPORTS DEPT.
Threat to Water Quality:	Not reported
Sub Chapter 15:	False
Regional Board Project Officer:	AA
Number of WMUDS at Facility:	1
Section Range:	06S22E32
RCRA Facility:	Not reported
Waste Discharge Requirements:	Not reported
Self-Monitoring Rept. Frequency:	Not reported
Waste Discharge System ID:	7B330118011
Solid Waste Information ID:	33-AA-0064

CHMIRS:

OES Incident Number:	01-4565
OES notification:	8/10/200107:24:53 AM
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported

BLYTHE AIRPORT DUMP (Continued) **S103320645**

Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Comments:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	No
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Reporting Party
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2001
Agency:	So Cal Edison
Incident Date:	8/10/200112:00:00 AM
Admin Agency:	Riverside County Environmental Health
Amount:	Not reported
Contained:	Yes
Site Type:	Airport
E Date:	Not reported
Substance:	Mineral oil with PCB
Quantity Released:	Not reported
BBLS:	0
Cups:	0
CUFT:	0
Gallons:	2
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	0.000000
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	Wind storm Knocked down transformer. Mineral oil was spilt. NOTE: PCB content of 200 Parts per million

3 SUNWORLD #1 **HIST CORTESE S103891543**
15550 WEST HOBSONWAY **LUST N/A**
BLYTHE, CA 92225

CORTESE:

Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225087
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225043
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225050
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225069
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225066
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225065
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225067
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225068
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225063
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225064
Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	7T2225070

SUNWORLD #1 (Continued) **S103891543**

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225071

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225072

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225073

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225074

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225075

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225076

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225077

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225078

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225079

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225080

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225081

Region: CORTESE
Facility County Code: 33

SUNWORLD #1 (Continued) **S103891543**

Reg By: LTNKA
Reg Id: 7T2225082

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225083

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225084

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225085

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225086

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225088

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225089

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225090

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225091

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225092

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225093

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225094

SUNWORLD #1 (Continued) **S103891543**

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225095

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225096

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225097

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225098

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225099

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225100

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225101

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225103

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225104

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225105

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225106

Region: CORTESE
Facility County Code: 33

SUNWORLD #1 (Continued) **S103891543**

Reg By: LTNKA
Reg Id: 7T2225107

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225108

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225109

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225110

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225111

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225112

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225113

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225114

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225115

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225116

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225117

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225118

SUNWORLD #1 (Continued) **S103891543**

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225119

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225120

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225121

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225122

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225123

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225124

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225125

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225126

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225127

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225128

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225129

Region: CORTESE
Facility County Code: 33

SUNWORLD #1 (Continued) **S103891543**

Reg By: LTNKA
Reg Id: 7T2225131

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225132

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225133

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225134

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225135

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225136

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225137

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225138

Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225130

LUST:
Region: STATE
Global Id: T0606500822
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/13/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225084
LOC Case Number: Not reported
File Location: Not reported

SUNWORLD #1 (Continued) **S103891543**

Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500822
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500822
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500822
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500822
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500822
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500823
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 05/14/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225085
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline

SUNWORLD #1 (Continued) **S103891543**

Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500823
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500823
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500823
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500823
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500823
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500824
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/23/1997
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225086
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500824
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500824
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500824
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500824
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500824
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500825
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225087
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500825
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500825
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500825
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500825
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500825
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500826
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225088
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500826
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500826
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500826
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500826
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500826
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500827
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/30/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225089
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500827
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500827
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500827
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500827
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500827
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500828
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225090
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500828
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500828
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500828
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500828
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500828
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500829
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/02/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225091
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500829
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500829
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500829
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500829
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500829
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500830
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/18/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225092
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500830
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500830
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500830
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500830
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500830
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500831
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/22/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225093
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500831
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500831
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500831
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500831
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500831
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500832
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225094
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500832
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500832
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500832
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500832
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500832
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500833
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225095
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500833
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500833
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500833
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500833
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500833
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500834
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/22/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225096
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500834
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500834
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500834
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500834
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500834
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500840
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/02/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225102
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500840
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500840
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500840
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500840
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500840
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500841
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/18/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225103
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500841
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500841
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500841
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500841
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500841
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500842
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/18/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225104
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500842
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500842
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500842
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500842
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500842
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500843
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225105
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500843
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500843
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500843
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500843
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500843
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500845
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225107
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500845
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500845
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500845
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500845
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500845
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500846
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225108
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500846
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500846
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500846
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500846
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500846
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500847
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/02/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225109
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500847
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500847
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500847
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500847
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500847
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500848
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225110
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500848
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500848
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500848
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500848
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500848
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500849
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225111
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500849
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500849
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500849
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500849
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500849
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500850
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/30/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225112
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500850
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500850
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500850
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500850
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500850
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500851
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/30/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225113
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500851
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

Global Id:	T0606500851
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0606500851
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500851
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500851
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500844
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/02/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225106
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500844
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500844
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500844
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500844
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500844
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500788
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/30/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225050
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500788
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500788
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500788
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500858
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225120
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500858
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Global Id:	T0606500858
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500858
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500858
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500858
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500859
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225121
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500859
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500859
Contact Type:	Local Agency Caseworker

SUNWORLD #1 (Continued) **S103891543**

Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500859
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery
Global Id:	T0606500859
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped
Global Id:	T0606500859
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500860
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225122
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500860
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported
Global Id:	T0606500860
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP

SUNWORLD #1 (Continued) **S103891543**

Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500860
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500860
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500860
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500861
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/13/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225123
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500861
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500861
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE

SUNWORLD #1 (Continued) **S103891543**

Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500861
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500861
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500861
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500862
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 07/22/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225124
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500862
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500862
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

SUNWORLD #1 (Continued) **S103891543**

LUST:
Global Id: T0606500862
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500862
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500862
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500863
Latitude: 33.6096253
Longitude: -114.697655
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/13/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225125
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500863
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500863
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500863

SUNWORLD #1 (Continued) **S103891543**

Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery
Global Id:	T0606500863
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped
Global Id:	T0606500863
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported
Region:	STATE
Global Id:	T0606500864
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/18/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225126
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500864
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported
Global Id:	T0606500864
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500864
Action Type:	Other
Date:	1950-01-01 00:00:00

SUNWORLD #1 (Continued) **S103891543**

Action: Leak Discovery

Global Id: T0606500864
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500864
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500865
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/23/1997
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225127
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500865
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500865
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500865
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

SUNWORLD #1 (Continued) **S103891543**

Global Id: T0606500865
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500865
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500866
Latitude: 33.6096253
Longitude: -114.697655
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 09/26/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225128
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500866
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500866
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500866
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500866
Action Type: Other

SUNWORLD #1 (Continued) **S103891543**

Date:	1950-01-01 00:00:00
Action:	Leak Stopped
Global Id:	T0606500866
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported
Region:	STATE
Global Id:	T0606500867
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/23/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225129
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500867
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported
Global Id:	T0606500867
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500867
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery
Global Id:	T0606500867
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

SUNWORLD #1 (Continued) **S103891543**

Global Id:	T0606500867
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500868
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225130
LOC Case Number:	91952
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500868
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500868
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500868
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500868
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500868
Action Type:	Other

SUNWORLD #1 (Continued) **S103891543**

Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500869
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/13/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225131
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500869
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500869
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500869
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500869
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500869
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

SUNWORLD #1 (Continued) **S103891543**

Region:	STATE
Global Id:	T0606500801
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/14/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225063
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500801
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500801
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500801
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500801
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500801
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500802

SUNWORLD #1 (Continued) **S103891543**

Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/14/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225064
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500802
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500802
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500802
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500802
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500802
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500803
Latitude:	33.611111
Longitude:	-114.694174

SUNWORLD #1 (Continued) **S103891543**

Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/25/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225065
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500803
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500803
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500803
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500803
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500803
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500804
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed

SUNWORLD #1 (Continued) **S103891543**

Status Date:	04/25/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225066
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500804
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500804
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500804
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500804
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500804
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500805
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/18/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)

SUNWORLD #1 (Continued) **S103891543**

Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225067
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500805
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500805
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500805
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500805
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500805
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500852
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/11/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP

SUNWORLD #1 (Continued) **S103891543**

RB Case Number: 7T2225114
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500852
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500852
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500852
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500852
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500852
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500853
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/26/1996
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225115
LOC Case Number: Not reported

SUNWORLD #1 (Continued) **S103891543**

File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500853
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500853
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500853
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500853
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500853
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500854
Latitude: 33.611111
Longitude: -114.694174
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/23/1997
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225116
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil

SUNWORLD #1 (Continued) **S103891543**

Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500854
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500854
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500854
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500854
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500854
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

Region: STATE
Global Id: T0606500855
Latitude: 33.6096253
Longitude: -114.697655
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/23/1997
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225117
LOC Case Number: Not reported
File Location: Not reported
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500855
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500855
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500855
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500855
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500855
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500856
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/30/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225118
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500856
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500856
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500856
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500856
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500856
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500857
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/14/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225119
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500857
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500857
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500857
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500857
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500857
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500835
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/11/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225097
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500835
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500835
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500835
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500835
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500835
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500836
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/02/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225098
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500836
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500836
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500836
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500836
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500836
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500837
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	10/11/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225099
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500837
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500837
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500837
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500837
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500837
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500838
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225100
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500838
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500838
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500838
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500838
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500838
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500839
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225101
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500839
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500839
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500839
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500839
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500839
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500870
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225132
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500870
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500870
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500870
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500870
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500870
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500871
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225133
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500871
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500871
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500871
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500871
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500871
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500872
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225134
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500872
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500872
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500872
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500872
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500872
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500873
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225135
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500873
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

Global Id:	T0606500873
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

LUST:

Global Id:	T0606500873
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500873
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500873
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500874
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225136
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500874
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500874
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500874
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500874
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500874
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500875
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225137
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500875
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500875
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500875
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500875
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500875
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500876
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225138
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500876
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500876
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500876
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500876
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500876
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500806
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/09/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225068
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500806
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500806
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500806
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500806
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500806
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500807
Latitude:	33.6096253
Longitude:	-114.697655
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	04/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225069
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500807
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500807
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500807
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500807
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500807
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500808
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/22/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225070
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500808
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500808
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500808
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500808
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500808
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500809
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/22/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225071
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500809
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500809
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500809
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500809
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500809
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500810
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225072
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500810
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500810
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500810
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500810
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500810
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500811
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225073
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500811
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500811
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500811
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500811
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500811
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500812
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/22/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225074
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500812
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500812
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500812
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500812
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500812
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500813
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225075
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500813
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500813
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500813
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500813
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500813
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500814
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225076
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500814
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500814
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500814
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500814
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500814
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500815
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/03/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225077
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500815
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500815
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500815
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500815
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500815
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500818
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	08/13/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225080
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500818
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500818
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500818
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500818
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500818
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500820
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	09/26/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225082
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500820
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500820
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500820
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500820
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500820
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500821
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/14/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225083
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500821
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500821
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500821
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500821
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500821
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500819
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/23/1997
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225081
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500819
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500819
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500819
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500819
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500819
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500816
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/03/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225078
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500816
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500816
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500816
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500816
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500816
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

Region:	STATE
Global Id:	T0606500817
Latitude:	33.611111
Longitude:	-114.694174
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	05/03/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225079
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

SUNWORLD #1 (Continued) **S103891543**

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500817
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500817
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500817
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

Global Id:	T0606500817
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Stopped

Global Id:	T0606500817
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Reported

LUST REG 7:

Region:	7
Status:	9 - Case Closed
Case Num:	7T2225050
Substance:	Gasoline - Automotive
ID:	1176
Global ID:	T0606500788
Lead Agency:	Regional Board
Case Worker:	RT

Region:	7
Status:	9 - Case Closed
Case Num:	7T2225123
Substance:	Gasoline - Automotive
ID:	518
Global ID:	T0606500861
Lead Agency:	Regional Board
Case Worker:	RT

SUNWORLD #1 (Continued) **S103891543**

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225071
Substance: Gasoline - Automotive
ID: 462
Global ID: T0606500809
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225072
Substance: Gasoline - Automotive
ID: 463
Global ID: T0606500810
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225073
Substance: Gasoline - Automotive
ID: 464
Global ID: T0606500811
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225074
Substance: Gasoline - Automotive
ID: 465
Global ID: T0606500812
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225075
Substance: Gasoline - Automotive
ID: 466
Global ID: T0606500813
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225076
Substance: Gasoline - Automotive
ID: 467
Global ID: T0606500814
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225077

SUNWORLD #1 (Continued) **S103891543**

Substance: Gasoline - Automotive
ID: 468
Global ID: T0606500815
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225078
Substance: Gasoline - Automotive
ID: 469
Global ID: T0606500816
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225079
Substance: Gasoline - Automotive
ID: 470
Global ID: T0606500817
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225080
Substance: Gasoline - Automotive
ID: 471
Global ID: T0606500818
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225063
Substance: Gasoline - Automotive
ID: 472
Global ID: T0606500801
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225081
Substance: Gasoline - Automotive
ID: 473
Global ID: T0606500819
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225082
Substance: Gasoline - Automotive
ID: 474
Global ID: T0606500820

SUNWORLD #1 (Continued) **S103891543**

Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225083
Substance: Gasoline - Automotive
ID: 475
Global ID: T0606500821
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225084
Substance: Gasoline - Automotive
ID: 476
Global ID: T0606500822
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225085
Substance: Gasoline - Automotive
ID: 477
Global ID: T0606500823
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225086
Substance: Gasoline - Automotive
ID: 478
Global ID: T0606500824
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225087
Substance: Gasoline - Automotive
ID: 479
Global ID: T0606500825
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225088
Substance: Gasoline - Automotive
ID: 480
Global ID: T0606500826
Lead Agency: Regional Board
Case Worker: RT

SUNWORLD #1 (Continued) **S103891543**

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225089
Substance: Gasoline - Automotive
ID: 481
Global ID: T0606500827
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225090
Substance: Gasoline - Automotive
ID: 482
Global ID: T0606500828
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225064
Substance: Gasoline - Automotive
ID: 483
Global ID: T0606500802
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225091
Substance: Gasoline - Automotive
ID: 484
Global ID: T0606500829
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225092
Substance: Gasoline - Automotive
ID: 485
Global ID: T0606500830
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225093
Substance: Gasoline - Automotive
ID: 486
Global ID: T0606500831
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225094

SUNWORLD #1 (Continued) **S103891543**

Substance: Gasoline - Automotive
ID: 487
Global ID: T0606500832
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225095
Substance: Gasoline - Automotive
ID: 488
Global ID: T0606500833
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225096
Substance: Gasoline - Automotive
ID: 489
Global ID: T0606500834
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225097
Substance: Gasoline - Automotive
ID: 490
Global ID: T0606500835
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225099
Substance: Gasoline - Automotive
ID: 491
Global ID: T0606500837
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225100
Substance: Gasoline - Automotive
ID: 492
Global ID: T0606500838
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225065
Substance: Gasoline - Automotive
ID: 493
Global ID: T0606500803

SUNWORLD #1 (Continued) **S103891543**

Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225101
Substance: Gasoline - Automotive
ID: 494
Global ID: T0606500839
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225102
Substance: Gasoline - Automotive
ID: 495
Global ID: T0606500840
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225103
Substance: Gasoline - Automotive
ID: 496
Global ID: T0606500841
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225104
Substance: Gasoline - Automotive
ID: 497
Global ID: T0606500842
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225105
Substance: Gasoline - Automotive
ID: 498
Global ID: T0606500843
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225106
Substance: Gasoline - Automotive
ID: 499
Global ID: T0606500844
Lead Agency: Regional Board
Case Worker: RT

SUNWORLD #1 (Continued) **S103891543**

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225107
Substance: Gasoline - Automotive
ID: 500
Global ID: T0606500845
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225108
Substance: Gasoline - Automotive
ID: 501
Global ID: T0606500846
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225109
Substance: Gasoline - Automotive
ID: 502
Global ID: T0606500847
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225110
Substance: Gasoline - Automotive
ID: 503
Global ID: T0606500848
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225066
Substance: Gasoline - Automotive
ID: 504
Global ID: T0606500804
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225111
Substance: Gasoline - Automotive
ID: 505
Global ID: T0606500849
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225112

SUNWORLD #1 (Continued) **S103891543**

Substance: Gasoline - Automotive
ID: 506
Global ID: T0606500850
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225113
Substance: Gasoline - Automotive
ID: 507
Global ID: T0606500851
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225114
Substance: Gasoline - Automotive
ID: 508
Global ID: T0606500852
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225115
Substance: Gasoline - Automotive
ID: 509
Global ID: T0606500853
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225116
Substance: Gasoline - Automotive
ID: 510
Global ID: T0606500854
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225117
Substance: Gasoline - Automotive
ID: 511
Global ID: T0606500855
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225118
Substance: Gasoline - Automotive
ID: 512
Global ID: T0606500856

SUNWORLD #1 (Continued) **S103891543**

Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225119
Substance: Gasoline - Automotive
ID: 513
Global ID: T0606500857
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225120
Substance: Gasoline - Automotive
ID: 514
Global ID: T0606500858
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225067
Substance: Gasoline - Automotive
ID: 515
Global ID: T0606500805
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225121
Substance: Gasoline - Automotive
ID: 516
Global ID: T0606500859
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225122
Substance: Gasoline - Automotive
ID: 517
Global ID: T0606500860
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225124
Substance: Gasoline - Automotive
ID: 519
Global ID: T0606500862
Lead Agency: Regional Board
Case Worker: RT

SUNWORLD #1 (Continued) **S103891543**

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225125
Substance: Gasoline - Automotive
ID: 520
Global ID: T0606500863
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225126
Substance: Gasoline - Automotive
ID: 521
Global ID: T0606500864
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225127
Substance: Gasoline - Automotive
ID: 522
Global ID: T0606500865
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225128
Substance: Gasoline - Automotive
ID: 523
Global ID: T0606500866
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225129
Substance: Gasoline - Automotive
ID: 524
Global ID: T0606500867
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225130
Substance: Gasoline - Automotive
ID: 525
Global ID: T0606500868
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225068

SUNWORLD #1 (Continued) **S103891543**

Substance: Gasoline - Automotive
ID: 526
Global ID: T0606500806
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225131
Substance: Gasoline - Automotive
ID: 527
Global ID: T0606500869
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225132
Substance: Gasoline - Automotive
ID: 528
Global ID: T0606500870
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225133
Substance: Gasoline - Automotive
ID: 529
Global ID: T0606500871
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225134
Substance: Gasoline - Automotive
ID: 530
Global ID: T0606500872
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225135
Substance: Gasoline - Automotive
ID: 531
Global ID: T0606500873
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225136
Substance: Gasoline - Automotive
ID: 532
Global ID: T0606500874

SUNWORLD #1 (Continued) **S103891543**

Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225137
Substance: Gasoline - Automotive
ID: 533
Global ID: T0606500875
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225138
Substance: Gasoline - Automotive
ID: 534
Global ID: T0606500876
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225069
Substance: Gasoline - Automotive
ID: 535
Global ID: T0606500807
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225070
Substance: Gasoline - Automotive
ID: 536
Global ID: T0606500808
Lead Agency: Regional Board
Case Worker: RT

Region: 7
Status: 9 - Case Closed
Case Num: 7T2225098
Substance: Gasoline - Automotive
ID: 537
Global ID: T0606500836
Lead Agency: Regional Board
Case Worker: RT

3 **SUN WORLD** LUST S104970796
15550 W HOBSONWAY N/A
BLYTHE, CA

RIVERSIDE CO. LUST:

Region:	RIVERSIDE
Facility ID:	91952
Site Closed:	Referred to Water Board
Date Closed:	10/25/1993
Case Type:	Soil only

---

3 **SUNWORLD FACILITY** LUST S106152993
15550 EAST HOBSONWAY N/A
BLYTHE, CA 92225

LUST:

Region:	STATE
Global Id:	T0606500781
Latitude:	33.6105968
Longitude:	-114.5851354
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	03/19/1996
Lead Agency:	COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker:	RSF
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	7T2225043
LOC Case Number:	Not reported
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

LUST:

Global Id:	T0606500781
Contact Type:	Regional Board Caseworker
Contact Name:	RON FALKOWSKI
Organization Name:	COLORADO RIVER BASIN RWQCB (REGION 7)
Address:	73-720 FRED WARING DR. STE. 100
City:	PALM DESERT
Email:	rfalk@waterboards.ca.gov
Phone Number:	Not reported

Global Id:	T0606500781
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP Closed Cases
Organization Name:	RIVERSIDE COUNTY LOP
Address:	PO Box 1280
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558982

LUST:

Global Id:	T0606500781
Action Type:	Other
Date:	1950-01-01 00:00:00
Action:	Leak Discovery

SUNWORLD FACILITY (Continued) **S106152993**

Global Id: T0606500781
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500781
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

LUST REG 7:
Region: 7
Status: 9 - Case Closed
Case Num: 7T2225043
Substance: Gasoline - Automotive
ID: 1177
Global ID: T0606500781
Lead Agency: Regional Board
Case Worker: RT

---

3 **BLYTHE LEMON RANCH #41** **HIST CORTESE** **S105022809**
15550 HOBSONEWAY **N/A**
BLYTHE, CA 92225

CORTESE:
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225102

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4 **BLYTHE AIRPORT** **HIST CORTESE** **S105022819**
17240 HOBSONWAY **LUST** **N/A**
BLYTHE, CA 92225

CORTESE:
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 7T2225153

LUST:
Region: STATE
Global Id: T0606500891
Latitude: 33.609605
Longitude: -114.711707
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 01/17/2002
Lead Agency: COLORADO RIVER BASIN RWQCB (REGION 7)
Case Worker: RSF
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 7T2225153
LOC Case Number: Not reported
File Location: Not reported

BLYTHE AIRPORT (Continued) **S105022819**

Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

LUST:
Global Id: T0606500891
Contact Type: Regional Board Caseworker
Contact Name: RON FALKOWSKI
Organization Name: COLORADO RIVER BASIN RWQCB (REGION 7)
Address: 73-720 FRED WARING DR. STE. 100
City: PALM DESERT
Email: rfalk@waterboards.ca.gov
Phone Number: Not reported

Global Id: T0606500891
Contact Type: Local Agency Caseworker
Contact Name: Riverside County LOP Closed Cases
Organization Name: RIVERSIDE COUNTY LOP
Address: PO Box 1280
City: RIVERSIDE
Email: Not reported
Phone Number: 9519558982

LUST:
Global Id: T0606500891
Action Type: ENFORCEMENT
Date: 2001-09-04 00:00:00
Action: Staff Letter

Global Id: T0606500891
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Discovery

Global Id: T0606500891
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Stopped

Global Id: T0606500891
Action Type: Other
Date: 1950-01-01 00:00:00
Action: Leak Reported

LUST REG 7:
Region: 7
Status: 9 - Case Closed
Case Num: 7T2225153
Substance: Gasoline - Automotive
ID: 459
Global ID: T0606500891
Lead Agency: Regional Board
Case Worker: YO

5 **FARMER AIR SERVICE**
17500 W HOBSON WAY
BLYTHE, CA 92225

CERC-NFRAP
CORRACTS
RCRA-NonGen
FINDS

1000818170
CAD980889216

CERC-NFRAP:
Site ID: 0903526
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13054216.00000
Person ID: 9271184.00000

Contact Sequence ID: 13060286.00000
Person ID: 9270048.00000

Contact Sequence ID: 13091025.00000
Person ID: 13002167.00000

Contact Sequence ID: 13176916.00000
Person ID: 9270438.00000

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 12/01/1988
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 08/31/1989
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 08/31/1989
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: Not reported
Date Completed: 08/31/1989
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/31/1989
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

CORRACTS:

EPA ID: CAD980889216
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 05/31/1989
Action: CA075LO - CA Prioritization, Facility or area was assigned a low

FARMER AIR SERVICE (Continued) **1000818170**

corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD980889216
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 07/29/1992
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-NonGen:
Date form received by agency: 08/03/1992
Facility name: FARMERS AERIAL SVC
Facility address: 17500 W HOBSON WAY
BLYTHE, CA 92225
EPA ID: CAD980889216
Mailing address: W HOBSON WAY
BLYTHE, CA 92225
Contact: NONNOTIF NONNOTIF
Contact address: 17500 W HOBSON WAY
BLYTHE, CA 92225
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: FARMERS AERIAL SVC
Owner/operator address: 17500 W HOBSON WY
BLYTHE, CA 92225
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No

FARMER AIR SERVICE (Continued) **1000818170**

Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Corrective Action Summary:

Event date: 05/31/1989
Event: CA029WQ

Event date: 05/31/1989
Event: CA Prioritization, Facility or area was assigned a low corrective action priority.

Event date: 05/31/1989
Event: CA049PA

Event date: 08/31/1989
Event: CA049SI

Event date: 07/29/1992
Event: CA Prioritization, Facility or area was assigned a low corrective action priority.

Event date: 07/29/1992
Event: Stabilization Measures Evaluation,This facility is not amenable to stabilization activity at the present time for reasons other than 1- it appears to be technically infeasible or inappropriate (NF) or 2- there is a lack of technical information (IN). Reasons for this conclusion may be the status of closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other administrative considerations.

Event date: Not reported
Event: CA03192

Violation Status: No violations found

FINDS:

Registry ID: 110002675436

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

6 **WOTEN AVIATION - BLYTHE**
17798 BLYTHE WAY
BLYTHE, CA 92225

Database(s): **SLIC**
EDR ID Number: **S105756788**
EPA ID Number: **N/A**

SLIC:
Region: 7
Responsible Party Name: Woten Aviation Services
Facility Status: Active
SLIC File Code: WAB
Township / Range: Not reported
Hydrologic Unit: Colorado River
Groundwater Levels: Not reported
Case Reference: Not reported
Consultant ID: 27
Agency ID: Not reported

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7 **WEST COAST FLYING SERVICE**
13-400 W 14TH SAVE
BLYTHE, CA 92225

Database(s): **CERC-NFRAP, CORRACTS, RCRA-NonGen, FINDS**
EDR ID Number: **1000818157**
EPA ID Number: **CAD067652156**

CERC-NFRAP:
Site ID: 0903527
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: Deferred to RCRA

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13055257.00000
Person ID: 9271184.00000

Contact Sequence ID: 13061327.00000
Person ID: 9270048.00000

Contact Sequence ID: 13092067.00000
Person ID: 13002167.00000

Contact Sequence ID: 13174083.00000
Person ID: 9270438.00000

Program Priority:
Description: RCRA Deferral Audit

Description: RCRA Deferral - Lead Confirmed

Description: RCRA Deferral - Further Superfund Assessment

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 12/01/1988
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 08/30/1989
Priority Level: Not reported

WEST COAST FLYING SERVICE (Continued) **1000818157**

Action: SITE INSPECTION
Date Started: Not reported
Date Completed: 08/30/1989
Priority Level: Deferred to RCRA (Subtitle C)

Action: RESOURCE CONSERVATION AND RECOVERY ACT FACILITY ASSESSMENT
Date Started: Not reported
Date Completed: 08/30/1989
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: Not reported
Date Completed: 08/30/1989
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

CORRACTS:

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 02/12/1996
Action: CA190 - RFI Report Received
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 04/15/1996
Action: CA999 - Corrective Action Process Terminated
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 05/27/1989
Action: CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 05/27/1989
Action: CA050 - RFA Completed
NAICS Code(s): Not reported
Original schedule date: 05/27/1989
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY

WEST COAST FLYING SERVICE (Continued) **1000818157**

Actual Date: 05/27/1989
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): Not reported
Original schedule date: 05/27/1989
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 06/06/1995
Action: CA210 - CA Responsibility Referred To A Non-RCRA Federal Authority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 08/30/1989
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 10/16/1994
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: 10/16/1994
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 10/16/1994
Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the, status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD067652156
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 10/16/1994
Action: CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s): Not reported
Original schedule date: Not reported

WEST COAST FLYING SERVICE (Continued) **1000818157**

Schedule end date: Not reported

RCRA-NonGen:
Date form received by agency: 07/01/1993
Facility name: WEST COAST FLYING SVC INC
Facility address: 13-400 WEST FOURTEENTH AVE
BLYTHE, CA 92225
EPA ID: CAD067652156
Mailing address: 13 FOURTH HUNDRED FOURTEENTH A
BLYTHE, CA 92225
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: Not reported
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: NONNOTIF
Owner/operator address: NONNOTIF
NONNOTIF, CA 92225
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 08/03/1992
Facility name: WEST COAST FLYING SVC INC
Classification: Not a generator, verified

WEST COAST FLYING SERVICE (Continued) **1000818157**

Corrective Action Summary:

Event date:	05/27/1989
Event:	RFA Completed
Event date:	05/27/1989
Event:	RFA Determination Of Need For An RFI, RFI is Necessary;
Event date:	05/27/1989
Event:	RFA Completed, Assessment was an RFA.
Event date:	08/30/1989
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	08/30/1989
Event:	CA074ME
Event date:	08/30/1989
Event:	CA049PA
Event date:	08/30/1989
Event:	CA029WQ
Event date:	08/30/1989
Event:	CA049SI
Event date:	10/16/1994
Event:	Stabilization Measures Evaluation,This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.
Event date:	10/16/1994
Event:	CA Prioritization, Facility or area was assigned a medium corrective action priority.
Event date:	10/16/1994
Event:	Stabilization Measures Evaluation,This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.
Event date:	06/06/1995
Event:	CA Responsibility Referred To A Non-RCRA Federal Authority
Event date:	02/12/1996
Event:	RFI Report Received
Event date:	04/15/1996
Event:	Corrective Action Process Terminated
Event date:	Not reported
Event:	CA03192

Facility Has Received Notices of Violations:

Regulation violated:	FR - 262.50-60

WEST COAST FLYING SERVICE (Continued) **1000818157**

Area of violation: Generators - General
Date violation determined: 01/24/1995
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/24/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 05/31/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 264.220-230.K
Area of violation: TSD - General
Date violation determined: 05/31/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 264.90-94.F
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 05/31/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 262.50-60
Area of violation: Generators - General

WEST COAST FLYING SERVICE (Continued) **1000818157**

Date violation determined: 05/31/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 264.220-230.K
Area of violation: TSD - General
Date violation determined: 05/24/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 264.90-94.F
Area of violation: TSD IS-Ground-Water Monitoring
Date violation determined: 05/24/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 262.50-60
Area of violation: Generators - General
Date violation determined: 05/24/1994
Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Regulation violated: F - 270
Area of violation: TSD - General
Date violation determined: 05/24/1994

WEST COAST FLYING SERVICE (Continued) **1000818157**

Date achieved compliance: 06/06/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/31/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 0
Final penalty amount: 0
Paid penalty amount: 0

Evaluation Action Summary:
Evaluation date: 12/21/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/06/1995
Evaluation lead agency: State

Evaluation date: 05/17/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/06/1995
Evaluation lead agency: State

Evaluation date: 05/17/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Ground-Water Monitoring
Date achieved compliance: 06/06/1995
Evaluation lead agency: State

Evaluation date: 05/17/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 06/06/1995
Evaluation lead agency: State

FINDS:

Registry ID: 110000609725

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Count: 33 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BLYTHE	S105022791	SO CAL EDISON - BLYTHE SE	505 14TH	92225	HIST CORTESE
BLYTHE	S104156503	WEST COAST-CLAYTON HELI.88-098	13400 14TH AVE	92225	WMUDS/SWAT
BLYTHE	U001573653	MOBIL OIL	9021 HWY 60	92225	HIST UST
BLYTHE	U001573643	J. M. DE FOREST INC.	12300 HWY 60 W.	92225	HIST UST
BLYTHE	S101590339	J M DEFOREST INC	12300 HIGHWAY 60 W	92225	CA FID UST, SWEEPS UST
BLYTHE	1009393172	LOST LAKE RESORT	42500 HWY 95	92225	INDIAN UST
BLYTHE	1011843698	LOST LAKE RESORT	42500 HWY 95	92225	INDIAN LUST
BLYTHE	S109821522	BLYTHE AIRPORT DUMPSITE	ADJACENT TO EAST SIDE OF RUNWA		SWF/LF
BLYTHE	1009394143	WATER WHEEL RESORT	CHR 20 - 20900, HWY 95	92225	INDIAN LUST
BLYTHE	1009393129	WATER WHEEL RESORT	CHR 20 - 20900, HWY 95	92225	INDIAN UST
BLYTHE	S107735973	BURFORD BYPASS TRUST PROPERTY (A.K.A. EASTERN GATEWAY RETAIL	SW CORNER OF HOBSONWAY E & INTAKE BLVD	92225	VCP, ENVIROSTOR
BLYTHE	1009393171	TWIN PALMS RESORT	HCR 20, BOX 1600 18 1/2 MILE N. CA HWY 95	92225	INDIAN UST
BLYTHE	U001573662	S&R OIL COMPANY-BULK PLANT	9265 E. HIGHWAY 60	92225	HIST UST
BLYTHE	S101590287	S & R OIL COMPANY-BULK PLANT	9265 E HIGHWAY 60	92225	CA FID UST, SWEEPS UST
BLYTHE	U001573655	PALO VERDE EQUIPMENT CO	11390 WEST HIGHWAY 60	92225	HIST UST
BLYTHE	S109548312	FARMERS AERIAL SVC	17500 W HOBSON WAY	92225	ENVIROSTOR
BLYTHE	S105022814	JOY IVERSON HARTWICK TRU	120 HOBSONWAY	92225	HIST CORTESE
BLYTHE	U004151241	QUIK CHEK WEST- LARRY'S QUIK CHEK	3504 W HOBSONWAY	92225	UST
BLYTHE	1009393126	AHA QUIN RESORT	HRC 20, HWY 95 P.O. BOX 2400	92225	INDIAN UST
BLYTHE	U001573648	LOST LAKE RESORT	LOST LAKE (31 MI. N. OF BLYTHE	92225	HIST UST
BLYTHE	U001573617	BLYTHE UNION 76 AUTO/TRUCK STO	MESA DRIVE	92225	HIST UST
BLYTHE	U001573611	BLYTHE MUNICIPAL GOLF COURSE	NORTH MESA	92225	HIST UST
BLYTHE	1003878669	RIVERSIDE CO DUMP	1000 MIDLAND RD	92225	CERC-NFRAP
BLYTHE	1014387846	BLYTHE SOLAR POWER PROJECT	8 MILES W OF BLYTHE	92225	RCRA-SQG
BLYTHE	1005441389	SHEPWELLS CORPORATION	7 MI N OF BLYTHE	92225	RCRA-SQG, FINDS, HAZNET
BLYTHE	A100109560	PRATT APIARIES	13510 RIVERSIDE AVE.	92225	AST
COUNTY	S105022408	COATS AND COMPANY	435 HOBSONWAY	92225	HIST CORTESE
DESERT CENTER	S104816282	CALTRANS DESERT CENTER	129476 HWY 60	92239	LUST
DESERT CENTER	1000111574	EAGLE MOUNTAIN PUMPING PLANT	10 MI N OF DESERT CENTER 4 S	92239	RCRA-SQG, FINDS
DESERT CENTER	1003879899	KAISER EAGLE MOUNTAIN	N OF HWY 10 8M OFF KAISER RD.	92239	CERC-NFRAP
RIPLEY	1000886229	TOHSHIN TRADING INC	34100 HWY 78 PMP	92225	RCRA-SQG, FINDS
RIVERSIDE COUNTY	M300003149	ROBERT R. FORD TRUCKING, INC.	PACIFIC CLAY / FORD PIT		MINES
RIVERSIDE COUNTY	M300002452	PACIFIC CLAY PRODS CO	RIVERSIDE COUNTY PITS (5 OPERATIONS)		MINES

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 07/12/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 79

Source: EPA
Telephone: N/A
Last EDR Contact: 10/12/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 07/12/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 79

Source: EPA
Telephone: N/A
Last EDR Contact: 10/12/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 07/12/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 79

Source: EPA
Telephone: N/A
Last EDR Contact: 10/12/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/25/2011
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 02/25/2011
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 09/09/2011
Date Data Arrived at EDR: 09/16/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 08/12/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/09/2011
Date Data Arrived at EDR: 03/15/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 91

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

RCRA-NonGen: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2011
Date Data Arrived at EDR: 07/07/2011
Date Made Active in Reports: 08/08/2011
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 10/05/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 03/16/2011
Date Data Arrived at EDR: 03/25/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 03/16/2011
Date Data Arrived at EDR: 03/25/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 81

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 07/05/2011
Date Data Arrived at EDR: 07/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 86

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 10/04/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 07/05/2011
Date Data Arrived at EDR: 07/05/2011
Date Made Active in Reports: 09/30/2011
Number of Days to Update: 87

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 10/04/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Annually

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/12/2011
Date Data Arrived at EDR: 02/11/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/09/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/08/2011
Date Data Arrived at EDR: 09/16/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 13

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 09/07/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Quarterly

US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 06/27/2011
Date Data Arrived at EDR: 06/27/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 78

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/28/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Semi-Annually

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 08/12/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 112

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 12/09/2005
Date Data Arrived at EDR: 12/11/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 31

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 07/11/2011
Next Scheduled EDR Contact: 09/05/2011
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/01/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 41

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/31/2011
Date Data Arrived at EDR: 09/14/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 15

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/14/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/21/2010
Date Made Active in Reports: 01/28/2011
Number of Days to Update: 99

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 09/08/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 21

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/08/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/17/2010
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 94

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/27/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77
Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 08/18/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/07/2011
Date Data Arrived at EDR: 01/21/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 59
Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/01/2010
Date Data Arrived at EDR: 11/10/2010
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 98
Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/21/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 60
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/11/2011
Date Data Arrived at EDR: 01/13/2011
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 34
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/13/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 04/14/2010
Date Data Arrived at EDR: 04/16/2010
Date Made Active in Reports: 05/27/2010
Number of Days to Update: 41

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/13/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 03/01/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 62

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Biennially

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPAa??s Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/10/2010
Date Data Arrived at EDR: 01/11/2011
Date Made Active in Reports: 02/16/2011
Number of Days to Update: 36

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/14/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 01/01/2008
Date Data Arrived at EDR: 02/18/2009
Date Made Active in Reports: 05/29/2009
Number of Days to Update: 100
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/05/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

COAL ASH DOE: Sleam-Electric Plan Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/16/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing
The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 07/15/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

STATE AND LOCAL RECORDS

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/15/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/22/2011
Date Data Arrived at EDR: 08/24/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 40

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/24/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Quarterly

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 08/23/2011
Date Data Arrived at EDR: 08/24/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 40

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/24/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Quarterly

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). This listing is no longer updated by the state agency.

Date of Government Version: 07/01/2011
Date Data Arrived at EDR: 07/01/2011
Date Made Active in Reports: 07/15/2011
Number of Days to Update: 14

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 10/04/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES].

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 06/01/2011
Date Data Arrived at EDR: 06/21/2011
Date Made Active in Reports: 07/15/2011
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/12/2011
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/12/2011
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 29
Source: SWRCB
Telephone: 916-480-1028
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Semi-Annually

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009
Date Data Arrived at EDR: 09/23/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 8
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18
Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/28/2011
Date Data Arrived at EDR: 06/29/2011
Date Made Active in Reports: 07/08/2011
Number of Days to Update: 9

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 05/03/2011
Date Made Active in Reports: 06/15/2011
Number of Days to Update: 43

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/12/2011
Number of Days to Update: 32

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/12/2011
Number of Days to Update: 32

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

AST: Aboveground Petroleum Storage Tank Facilities

Registered Aboveground Storage Tanks.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: State Water Resources Control Board
Telephone: 916-341-5712
Last EDR Contact: 10/11/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 24

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/13/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/15/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/28/2011
Date Data Arrived at EDR: 07/21/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 41

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2011
Date Data Arrived at EDR: 08/11/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 29

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/15/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/16/2011
Number of Days to Update: 28

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 10/18/2010
Number of Days to Update: 19

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 09/30/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Varies

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 08/09/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 31

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/15/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 05/24/2011
Date Data Arrived at EDR: 05/24/2011
Date Made Active in Reports: 06/15/2011
Number of Days to Update: 22

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Varies

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/09/2010
Date Data Arrived at EDR: 08/11/2010
Date Made Active in Reports: 08/20/2010
Number of Days to Update: 9

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/01/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/18/2011
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 23

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/19/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/09/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 27

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/01/2011
Date Data Arrived at EDR: 06/21/2011
Date Made Active in Reports: 07/15/2011
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations
This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 05/05/2011
Date Data Arrived at EDR: 08/02/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 42

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/31/2011
Date Data Arrived at EDR: 02/01/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 48

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 08/04/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 39

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/16/2011
Date Data Arrived at EDR: 06/02/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 103

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 08/11/2011
Date Data Arrived at EDR: 08/12/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 32

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 05/05/2011
Date Data Arrived at EDR: 08/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 36

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/01/2011
Date Data Arrived at EDR: 06/01/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 13

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 08/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 08/18/2011
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 25

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 08/04/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 39

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 08/11/2011
Date Data Arrived at EDR: 08/12/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 32

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 07/01/2011
Date Data Arrived at EDR: 08/26/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 18

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 08/04/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 39

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 05/05/2011
Date Data Arrived at EDR: 07/05/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 70

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 10/04/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY RECORDS

Manufactured Gas Plants: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/21/2011
Date Data Arrived at EDR: 07/21/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/21/2011
Date Data Arrived at EDR: 07/21/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 21

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Semi-Annually

BUTTE COUNTY:

CUPA Facility Listing

Cupa facility list.

Date of Government Version: 03/29/2011
Date Data Arrived at EDR: 04/20/2011
Date Made Active in Reports: 05/17/2011
Number of Days to Update: 27

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Varies

COLUSA COUNTY:

CUPA Facility List

Cupa facility list.

Date of Government Version: 12/01/2010
Date Data Arrived at EDR: 04/20/2011
Date Made Active in Reports: 05/17/2011
Number of Days to Update: 27

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/30/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 19

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/09/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Semi-Annually

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 09/09/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 24

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 08/22/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/18/2011
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 23

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 02/08/2011
Date Data Arrived at EDR: 03/03/2011
Date Made Active in Reports: 03/24/2011
Number of Days to Update: 21

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 10/11/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

INYO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 20

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 09/13/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/09/2011
Date Data Arrived at EDR: 06/09/2011
Date Made Active in Reports: 07/08/2011
Number of Days to Update: 29

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/28/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 24

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 07/25/2011
Date Data Arrived at EDR: 07/27/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 15

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/27/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 08/23/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 02/09/2011
Date Data Arrived at EDR: 02/09/2011
Date Made Active in Reports: 03/04/2011
Number of Days to Update: 23

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/22/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 02/03/2011
Date Data Arrived at EDR: 02/08/2011
Date Made Active in Reports: 03/03/2011
Number of Days to Update: 23

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/25/2011
Next Scheduled EDR Contact: 11/07/2011
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 05/02/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/18/2011
Date Data Arrived at EDR: 07/21/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 21

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 10/17/2011
Next Scheduled EDR Contact: 01/30/2012
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List
A listing of sites included in the county?s Certified Unified Program Agency database. California?s Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 09/13/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/04/2011
Number of Days to Update: 21

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 07/15/2011
Date Data Arrived at EDR: 07/25/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 17

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 10/11/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 06/06/2011
Date Data Arrived at EDR: 06/06/2011
Date Made Active in Reports: 06/15/2011
Number of Days to Update: 9

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/07/2011
Date Data Arrived at EDR: 07/08/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 34

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 07/09/2008
Date Data Arrived at EDR: 07/09/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 22

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

NEVADA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
CUPA facility list.

Date of Government Version: 08/22/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 27

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 08/22/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 08/01/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 27

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 08/02/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 41

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 08/01/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 09/16/2011
Number of Days to Update: 24

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/17/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/18/2011
Number of Days to Update: 35

Source: Placer County Health and Human Services
Telephone: 530-889-7312
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 07/22/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 20

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 07/22/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 20

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/26/2012
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/02/2011
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 23

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/02/2011
Date Data Arrived at EDR: 07/19/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 23

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 10/07/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/26/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 19

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database
The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/09/2010
Date Data Arrived at EDR: 09/15/2010
Date Made Active in Reports: 09/29/2010
Number of Days to Update: 14

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 09/16/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Quarterly

Solid Waste Facilities
San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2010
Date Data Arrived at EDR: 11/16/2010
Date Made Active in Reports: 01/25/2011
Number of Days to Update: 70

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Varies

Environmental Case Listing
The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/27/2011
Date Data Arrived at EDR: 06/29/2011
Date Made Active in Reports: 07/08/2011
Number of Days to Update: 9

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 24

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

SAN MATEO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 07/13/2011
Date Data Arrived at EDR: 07/15/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 27

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/12/2012
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/20/2011
Date Data Arrived at EDR: 06/21/2011
Date Made Active in Reports: 07/15/2011
Number of Days to Update: 24

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

SANTA CLARA COUNTY:

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 09/06/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 10/10/2011
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 09/01/2011
Date Data Arrived at EDR: 09/01/2011
Date Made Active in Reports: 10/03/2011
Number of Days to Update: 32

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA Facility List
CUPA facility listing.

Date of Government Version: 08/31/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 9

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/31/2011
Date Data Arrived at EDR: 08/31/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 19

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2011
Date Data Arrived at EDR: 06/29/2011
Date Made Active in Reports: 07/08/2011
Number of Days to Update: 9

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2011
Date Data Arrived at EDR: 07/01/2011
Date Made Active in Reports: 07/13/2011
Number of Days to Update: 12

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SONOMA COUNTY:

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/05/2011
Date Data Arrived at EDR: 04/06/2011
Date Made Active in Reports: 05/12/2011
Number of Days to Update: 36

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 10/03/2011
Next Scheduled EDR Contact: 01/16/2012
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/13/2011
Date Data Arrived at EDR: 06/14/2011
Date Made Active in Reports: 07/13/2011
Number of Days to Update: 29

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 07/26/2011
Date Data Arrived at EDR: 08/26/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 24

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/23/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 04/01/2011
Date Data Arrived at EDR: 04/07/2011
Date Made Active in Reports: 05/12/2011
Number of Days to Update: 35

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 10/11/2011
Next Scheduled EDR Contact: 01/23/2012
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/23/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 07/26/2011
Date Data Arrived at EDR: 08/08/2011
Date Made Active in Reports: 09/09/2011
Number of Days to Update: 32

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/25/2011
Date Data Arrived at EDR: 06/21/2011
Date Made Active in Reports: 07/13/2011
Number of Days to Update: 22

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 09/20/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 08/15/2011
Date Data Arrived at EDR: 08/23/2011
Date Made Active in Reports: 09/16/2011
Number of Days to Update: 24

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 10/11/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 08/23/2011
Date Data Arrived at EDR: 08/26/2011
Date Made Active in Reports: 09/19/2011
Number of Days to Update: 24

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 12/31/2007
Date Data Arrived at EDR: 08/26/2009
Date Made Active in Reports: 09/11/2009
Number of Days to Update: 16

Source: Department of Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/26/2011
Next Scheduled EDR Contact: 12/05/2011
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 07/20/2011
Date Made Active in Reports: 08/11/2011
Number of Days to Update: 22

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/20/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2011
Date Data Arrived at EDR: 08/09/2011
Date Made Active in Reports: 09/16/2011
Number of Days to Update: 38

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/09/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2008
Date Data Arrived at EDR: 12/01/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/24/2011
Date Made Active in Reports: 06/30/2011
Number of Days to Update: 6

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/31/2011
Next Scheduled EDR Contact: 12/12/2011
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 08/19/2011
Date Made Active in Reports: 09/15/2011
Number of Days to Update: 27

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

STREET AND ADDRESS INFORMATION

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Cocopah Nursery Update
Blythe, CA 92225

Inquiry Number: 3186188.1w
October 18, 2011

EDR DataMap™ Well Search Report

EDR® Environmental Data Resources Inc

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Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
1	USGS3084233
2	USGS3084220
3	USGS3084398
4	USGS3084385
5	USGS3084315
6	USGS3084312
7	USGS3084509
8	USGS3084492
10	USGS3084491
9	USGS3084493
11	USGS3084489
11	USGS3084488
9	USGS3084484
12	USGS3084468
13	USGS3084469
14	USGS3084448
15	USGS3084445
16	USGS3084618
16	USGS3084617
16	USGS3084616
17	USGS3084619
18	USGS3084603
16	USGS3084602
19	USGS3084598
20	USGS3084591
21	USGS3084588
22	USGS3084589
23	USGS3084582
24	USGS3084563
25	USGS3084564
26	USGS3084548
25	USGS3084541
25	USGS3084521
27	USGS3084712
27	USGS3084706
27	USGS3084675
28	USGS3084674
29	USGS3084657
28	USGS3084646
29	USGS3084651
29	USGS3084650
29	USGS3084648
29	USGS3084649
28	USGS3084647
30	USGS3084634

GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
30	USGS3084635
31	USGS3084624
31	USGS3084623
32	USGS3084626
33	USGS3084628
34	USGS3084625
32	USGS3084627
31	USGS3084819
32	USGS3084817
35	USGS3084816
32	USGS3084807
36	USGS3084802
37	USGS3084735
38	USGS3084794
39	USGS3084785
40	USGS3084777
41	USGS3084772
40	USGS3084762
40	USGS3084749
43	USGS3084751
42	USGS3084753
42	USGS3084752
44	USGS3084755
44	USGS3084754
40	USGS3084750
43	USGS3084732
42	USGS3084733
42	USGS3084734
43	USGS3084923
43	USGS3084925
43	USGS3084924
43	USGS3084922
45	USGS3084890
45	USGS3084881
45	USGS3084880
45	USGS3084882
45	USGS3084876
45	USGS3084874
45	USGS3084869
45	USGS3084868
45	USGS3084866
45	USGS3084867
46	USGS3084864
47	USGS3084861
46	USGS3084862
48	USGS3084858

GEOCHECK VERSION 2.1
SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
49	USGS3084857
50	USGS3085023
51	USGS3085020
50	USGS3085008
52	USGS3085010
53	USGS3084995
54	USGS3084996
55	USGS3085009
55	USGS3084987
56	USGS3084972
57	USGS3084954
58	USGS3084950
59	USGS3084941
60	USGS3084938
61	USGS3084939
62	USGS3085079
63	USGS3085090
63	USGS3085080
64	USGS3085070
64	USGS3085069
65	USGS3085071
63	USGS3085068
66	USGS3085060
67	USGS3085061
63	USGS3085062
68	USGS3085163
69	USGS3085147
70	USGS3085260

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	CADW40000004869
5	CADW40000004813
7	CADW40000004805
8	CADW40000004800
9	CADW40000004799
11	CADW40000004795
11	CADW40000004794
9	CADW40000004789
12	CADW40000004781
13	CADW40000004780
14	CADW40000004768
15	CADW40000004765
16	CADW40000004727
16	CADW40000004726
17	CADW40000004725
18	CADW40000004718
18	CADW40000004717
21	CADW40000004707
20	CADW40000004702
24	CADW40000004692
25	CADW40000004691

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
26	CADW40000004690
25	3301553
23	3301350
25	CADW40000004681
27	CADW40000004675
27	CADW40000004673
27	CADW40000004666
29	CADW40000004660
31	CADW40000004647
32	CADW40000004646
33	CADW40000004645
34	CADW40000004641
32	CADW40000004635
35	CADW40000004632
37	CADW40000004608
39	CADW40000004596
40	CADW40000004588
41	CADW40000004582
42	CADW40000004573
42	CADW40000004571
42	CADW40000004570
44	3310028
44	3310028
46	CADW40000004507
45	CADW40000004502
45	CADW40000004503
47	CADW40000004501
46	CADW40000004500
48	CADW40000004496
49	CADW40000004494
50	CADW40000004461
50	CADW40000004450
52	CADW40000004449
53	CADW40000004446
54	CADW40000004445
55	CADW40000004444
55	CADW40000004440
56	3310028
56	CADW40000004432
57	CADW40000004414
59	CADW40000004371
60	CADW40000004370
61	CADW40000004369
62	CADW40000004313
63	CADW40000004311
63	CADW40000004310
63	CADW40000004304
64	CADW40000004303
64	CADW40000004302
65	CADW40000004301
66	CADW40000004296
67	CADW40000004295
63	CADW40000004294
68	CADW40000004183

GEOCHECK VERSION 2.1
SUMMARY

STATE WATER WELL INFORMATION

MAP ID	WELL ID
69	CADW40000004175
70	CADW40000004041

PUBLIC WATER SUPPLY SYSTEM INFORMATION

NO WELLS FOUND

USGS TOPOGRAPHIC MAP(S)

33114-E6 RIPLEY, CA
33114-E7 ROOSEVELT MINE, CA
33114-F6 MCCOY WASH, CA

AREA RADON INFORMATION

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	1		
Agency cd:	USGS	Site no:	333846114413201
Site name:	006S022E20A001S		
Latitude:	333846	EDR Site id:	USGS3084233
Longitude:	1144132	Dec lat:	33.64613448
Dec lon:	-114.69301551	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	395.79	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19670101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	250	Hole depth:	276
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1967-06-15
Water quality data end date:	1967-06-15	Water quality data count:	1
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	148.00	

Map ID:	2		
Agency cd:	USGS	Site no:	333836114405801
Site name:	006S022E21B001S		
Latitude:	333836.27	EDR Site id:	USGS3084220
Longitude:	1144058.70	Dec lat:	33.64343179
Dec lon:	-114.6837652	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWNWNES21 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000
Altitude:	373.9	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19660415
Date inventoried:	19660712	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	378.	Hole depth:	378.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1966-09-19
Water quality data end date:	1966-09-19	Water quality data count:	1
Ground water data begin date:	1966-04-28	Ground water data end date:	2000-01-25
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-25	122.12				
1971-07-23					
Note: The site was being pumped.					
1966-08-23	120.7		1966-04-28	117	

Map ID:	3		
Agency cd:	USGS	Site no:	333808114405701
Site name:	006S022E21K001S		
Latitude:	333807.81	EDR Site id:	USGS3084398
Longitude:	1144056.76	Dec lat:	33.63552644
Dec lon:	-114.6832262	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWNWSES21 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000
Altitude:	375.3	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19660504
Date inventoried:	19660712	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	323.	Hole depth:	323.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1966-06-00
Water quality data end date:	1966-06-00	Water quality data count:	1
Ground water data begin date:	1966-05-11	Ground water data end date:	2000-01-25
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-25					
Note: The well was destroyed (no water level is recorded).					

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1971-07-28	159.64				
Note: The site was being pumped.					
1966-08-24	121.3		1966-05-11	126	

Map ID:	4		
Agency cd:	USGS	Site no:	333803114423801
Site name:	006S022E19R001S		
Latitude:	333803.90	EDR Site id:	USGS3084385
Longitude:	1144241.98	Dec lat:	33.63444031
Dec lon:	-114.71245483	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESESES19 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000
Altitude:	395.75	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19770707
Date inventoried:	19900923	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	300.	Hole depth:	300.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1977-09-17	Ground water data end date:	1999-09-15
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-15	147.11		1997-03-07	147.06	
1990-09-23	149.79		1977-09-17	150	

Map ID:	5		
Agency cd:	USGS	Site no:	333753114421701
Site name:	006S022E29D001S		
Latitude:	333753	EDR Site id:	USGS3084315
Longitude:	1144217	Dec lat:	33.63141263
Dec lon:	-114.7055157	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	394.2	Altitude method:	M
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19420101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	193	Hole depth:	268
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-15
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1971-07-15	145.18		1971-07-01	145.00	

Map ID:	6		
Agency cd:	USGS	Site no:	333752114410801
Site name:	006S022E28C001S		
Latitude:	333752.04	EDR Site id:	USGS3084312
Longitude:	1144108.34	Dec lat:	33.631146
Dec lon:	-114.6864429	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNENWS28 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000
Altitude:	392.2	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20000125	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	7		
Agency cd:	USGS	Site no:	333744114421501
Site name:	006S022E29C001S		
Latitude:	333743.84	EDR Site id:	USGS3084509
Longitude:	1144214.63	Dec lat:	33.62886825
Dec lon:	-114.70485731	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWNENWS29 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000
Altitude:	393.6	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-24	Ground water data end date:	1999-09-15
Ground water data count:	3		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-15	144.75		1992-02-15	146.99	
1990-09-24	147.81				

Map ID:	8		
Agency cd:	USGS	Site no:	333737114404601
Site name:	006S022E28H001S		
Latitude:	333737	EDR Site id:	USGS3084492
Longitude:	1144046	Dec lat:	33.62696834
Dec lon:	-114.68023711	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	355.00	Altitude method:	M
Altitude accuracy:	5.	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19650101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	300	Hole depth:	300
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-09-01	Ground water data end date:	1971-09-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-09-01	107.00	

Map ID:	10		
Agency cd:	USGS	Site no:	333737114403401
Site name:	006S022E28G001S		
Latitude:	333737	EDR Site id:	USGS3084491
Longitude:	1144034	Dec lat:	33.62696834
Dec lon:	-114.67690368	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	362.	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19650101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	535.	Hole depth:	581.
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1966-02-09
Water quality data end date:	1966-02-09	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 0

Map ID:	9		
Agency cd:	USGS	Site no:	333737114415201
Site name:	006S022E29G001S		
Latitude:	333737	EDR Site id:	USGS3084493
Longitude:	1144152	Dec lat:	33.62696831
Dec lon:	-114.69857099	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	392.5	Altitude method:	M
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19430101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	350	Hole depth:	375
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1947-01-08
Water quality data end date:	1947-01-08	Water quality data count:	1
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	142.00	

Map ID:	11		
Agency cd:	USGS	Site no:	333736114392502
Site name:	006S022E26E002S		
Latitude:	333736	EDR Site id:	USGS3084489
Longitude:	1143925	Dec lat:	33.6266906
Dec lon:	-114.65773644	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	270.00	Altitude method:	M
Altitude accuracy:	5.	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19670101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	21.0	Hole depth:	37.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1967-03-28
Water quality data end date:	1967-03-28	Water quality data count:	1
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1971-07-01	17.00		1971-07-01	17.00	
1967-03-28	15.20				

Map ID:	11		
Agency cd:	USGS	Site no:	333736114392501
Site name:	006S022E26E001S		
Latitude:	333736	EDR Site id:	USGS3084488
Longitude:	1143925	Dec lat:	33.6266906
Dec lon:	-114.65773644	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	270.00	Altitude method:	M
Altitude accuracy:	5.	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19670101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	64.0	Hole depth:	121
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1967-03-28
Water quality data end date:	1967-03-28	Water quality data count:	1
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1971-07-01	18.00		1971-07-01	18.00	
1967-03-28	15.58				

Map ID:	9		
Agency cd:	USGS	Site no:	333734114415101
Site name:	006S022E29G002S		
Latitude:	333732.41	EDR Site id:	USGS3084484
Longitude:	1144150.95	Dec lat:	33.62569334
Dec lon:	-114.6982793	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESWNES29 T06S R22E S
Location map:	MCCOY WASH	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	391.9	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900923	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-23	Ground water data end date:	1999-09-15
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-15	142.15		1990-09-23	144.96	

Map ID:	12		
Agency cd:	USGS	Site no:	333729114392501
Site name:	006S022E26E003S		
Latitude:	333729	EDR Site id:	USGS3084468
Longitude:	1143925	Dec lat:	33.62474621
Dec lon:	-114.65773641	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	262.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19590101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	12.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

Map ID:	13		
Agency cd:	USGS	Site no:	333729114394101
Site name:	006S022E27H001S		
Latitude:	333729	EDR Site id:	USGS3084469
Longitude:	1143941	Dec lat:	33.6247462
Dec lon:	-114.66218099	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	264.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	12.00	

Map ID:	14		
Agency cd:	USGS	Site no:	333723114412901
Site name:	006S022E29J001S		
Latitude:	333723	EDR Site id:	USGS3084448
Longitude:	1144140	Dec lat:	33.62307953
Dec lon:	-114.69523751	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NWNESES29 T06S R22E S
Location map:	RIPLEY	Map scale:	24000

Altitude:	390.	Altitude method:	M
Altitude accuracy:	2	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	194308
Date inventoried:	19610307	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	243.	Hole depth:	252.
Source of depth data:	owner	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1943-08-00	Ground water data end date:	1999-09-15
Ground water data count:	6		

Ground-water levels, Number of Measurements: 6

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-15					
Note: The well was destroyed (no water level is recorded).					
1990-09-23					
Note: The well was destroyed (no water level is recorded).					
1971-07-14	137.82		1966-11-16	133.02	
1961-06-09	134.96		1943-08	137.5	

Map ID:	15		
Agency cd:	USGS	Site no:	333721114423101
Site name:	006S022E29M001S		
Latitude:	333720.22	EDR Site id:	USGS3084445
Longitude:	1144232.99	Dec lat:	33.62230731
Dec lon:	-114.70995738	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWNWSWS29 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	393.6	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19790319
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	304.	Hole depth:	310.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1979-03-23	Ground water data end date:	1999-09-15
Ground water data count:	4		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-15	145.65		1997-03-07	146.18	
1990-09-24	148.33		1979-03-23	144	

Map ID:	16		
Agency cd:	USGS	Site no:	333703114394001
Site name:	006S022E27R002S		
Latitude:	333703	EDR Site id:	USGS3084618
Longitude:	1143940	Dec lat:	33.61752417
Dec lon:	-114.66190312	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	259.0	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19590101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	10.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	9.00	

Map ID:	16		
Agency cd:	USGS	Site no:	333703114393201
Site name:	006S022E27R001S		
Latitude:	333703	EDR Site id:	USGS3084617
Longitude:	1143932	Dec lat:	33.61752417
Dec lon:	-114.65968083	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

Altitude:	257.0	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	9.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	7.00	

Map ID:	16		
Agency cd:	USGS	Site no:	333703114392801
Site name:	006S022E27R003S		
Latitude:	333703	EDR Site id:	USGS3084616
Longitude:	1143928	Dec lat:	33.61752417
Dec lon:	-114.65856968	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	259.0	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19480101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	9.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	17		
Agency cd:	USGS	Site no:	333703114415901
Site name:	006S022E29Q001S		
Latitude:	333702.73	EDR Site id:	USGS3084619
Longitude:	1144158.91	Dec lat:	33.61744912
Dec lon:	-114.70049037	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWSWSES29 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	390.6	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19790312
Date inventoried:	19900923	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	306.	Hole depth:	310.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1979-03-19	Ground water data end date:	1999-09-14
Ground water data count:	5		

Ground-water levels, Number of Measurements: 5

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-09-14	142.11		1997-03-07	142.62	
1992-02-15	144.54		1990-09-23	144.28	
1979-03-19	141				

Map ID:	18		
Agency cd:	USGS	Site no:	333701114411301
Site name:	006S022E33C002S		
Latitude:	333701.18	EDR Site id:	USGS3084603
Longitude:	1144113.31	Dec lat:	33.61701859
Dec lon:	-114.68782332	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	338.6	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030528	Mean greenwich time offset:	PST

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2003-05-28	Ground water data end date:	2003-05-28
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-05-28		

Note: An obstruction was encountered in the well above the water surface (no water level recorded).

Map ID:	16		
Agency cd:	USGS	Site no:	333701114392501
Site name:	006S022E35D001S		
Latitude:	333701	EDR Site id:	USGS3084602
Longitude:	1143925	Dec lat:	33.61696863
Dec lon:	-114.65773632	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	258.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19360101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	19		
Agency cd:	USGS	Site no:	333700114395001
Site name:	006S022E34B001S		
Latitude:	333700	EDR Site id:	USGS3084598
Longitude:	1143950	Dec lat:	33.61669085
Dec lon:	-114.66468096	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NWNWNES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	257.2	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	1916
Date inventoried:	19711007	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-10-07	Ground water data end date:	1971-10-07
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-10-07		

Note: The well was destroyed (no water level is recorded).

Map ID:	20		
Agency cd:	USGS	Site no:	333655114411301
Site name:	006S022E33C001S		
Latitude:	333654.92	EDR Site id:	USGS3084591
Longitude:	1144113.41	Dec lat:	33.61527975
Dec lon:	-114.68785108	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWNENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	335.4	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030528	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 2003-05-28
Ground water data end date: 2003-05-28
Ground water data count: 1

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-05-28	85.98	

Map ID: 21
Agency cd: USGS
Site no: 333652114395801
Site name: 006S022E34C001S
Latitude: 333652.64
EDR Site id: USGS3084588
Longitude: 1144000.21
Dec lat: 33.61464646
Dec lon: -114.66751713
Coor meth: D
Coor accr: H
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 04
State: 06
County: 065
Country: US
Land net: SENENWS34 T06S R22E S
Location map: RIPLEY
Map scale: 24000
Altitude: 338.0
Altitude method: D
Altitude accuracy: 0.1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flat surface
Site type: Ground-water other than Spring
Date construction: Not Reported
Date inventoried: 19900924
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: Not Reported
Hole depth: Not Reported
Source of depth data: Not Reported
Project number: CHI
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00
Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1990-09-24
Ground water data end date: 2000-01-24
Ground water data count: 2

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel
2000-01-24	88.38	
1990-09-24	89.26	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	22		
Agency cd:	USGS	Site no:	333652114405901
Site name:	006S022E33C003S		
Latitude:	333652.07	EDR Site id:	USGS3084589
Longitude:	1144059.26	Dec lat:	33.61448811
Dec lon:	-114.6839204	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SENENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	335.7	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030528	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	117.1	Hole depth:	Not Reported
Source of depth data:	reporting agency (generally USGS)	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2003-05-28	Ground water data end date:	2003-05-28
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-05-28	86.31	

Map ID:	23		
Agency cd:	USGS	Site no:	333648114392401
Site name:	006S022E35E001S		
Latitude:	333648	EDR Site id:	USGS3084582
Longitude:	1143924	Dec lat:	33.61335762
Dec lon:	-114.65745849	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	260.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19160101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	24		
Agency cd:	USGS	Site no:	333647114400901
Site name:	006S022E34F001S		
Latitude:	333647	EDR Site id:	USGS3084563
Longitude:	1144009	Dec lat:	33.61307983
Dec lon:	-114.66995885	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWSENWS34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	336.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	1974
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-24	Ground water data end date:	1992-03-29
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1992-03-29	91.38		1990-09-24	91.00	

Map ID:	25		
Agency cd:	USGS	Site no:	333647114421401
Site name:	006S022E32F001S		
Latitude:	333647	EDR Site id:	USGS3084564
Longitude:	1144214	Dec lat:	33.61307978
Dec lon:	-114.7046821	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	388.5	Altitude method:	M
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19430101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	230	Hole depth:	246
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1959-09-24
Water quality data end date:	1961-05-23	Water quality data count:	2
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	139.00	

Map ID:	26		
Agency cd:	USGS	Site no:	333646114431201
Site name:	006S022E31F001S		
Latitude:	333646.91	EDR Site id:	USGS3084548
Longitude:	1144311.66	Dec lat:	33.61305476
Dec lon:	-114.72069924	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESENWS31 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	389.3	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-24	Ground water data end date:	1999-08-27
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-08-27	141.40				
Note: Foreign substance was present on the surface of the water.					
1990-09-24	155.31				

Map ID:	25		
Agency cd:	USGS	Site no:	333645114421801
Site name:	006S022E32F002S		
Latitude:	333645.22	EDR Site id:	USGS3084541
Longitude:	1144217.57	Dec lat:	33.61258535
Dec lon:	-114.70567379	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWSENWS32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	388.6	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19731126
Date inventoried:	19990914	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	300.	Hole depth:	300.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1973-12-28	Ground water data end date:	1999-11-19
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-11-19	141.58		1999-11-19	141.58	
1999-09-14					
Note: The site was being pumped.					
1973-12-28	137				

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	25		
Agency cd:	USGS	Site no:	333644114421601
Site name:	006S022E32F003S		
Latitude:	333644.22	EDR Site id:	USGS3084521
Longitude:	1144215.83	Dec lat:	33.61230758
Dec lon:	-114.70519044	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWSENWS32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	387.5	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	20020320
Date inventoried:	20020418	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	500.	Hole depth:	520.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2002-03-25	Ground water data end date:	2002-04-18
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2002-04-18					
Note: The site was being pumped.					
2002-03-25	147				

Map ID:	27		
Agency cd:	USGS	Site no:	333643114410001
Site name:	006S022E33F003S		
Latitude:	333642.79	EDR Site id:	USGS3084712
Longitude:	1144100.00	Dec lat:	33.6119104
Dec lon:	-114.68412593	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	336.5	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	20020927
Date inventoried:	20030528	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	110.	Hole depth:	110.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2003-05-28	Ground water data end date:	2003-05-28
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-05-28	87.22	

Map ID:	27		
Agency cd:	USGS	Site no:	333642114410901
Site name:	006S022E33F002S		
Latitude:	333642.21	EDR Site id:	USGS3084706
Longitude:	1144108.83	Dec lat:	33.61174929
Dec lon:	-114.68657877	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWSENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	336.9	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	20020928
Date inventoried:	20030528	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	110.	Hole depth:	110.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2003-05-28	Ground water data end date:	2003-05-28
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-05-28	90.99	

Map ID:	27		
Agency cd:	USGS	Site no:	333639114410201
Site name:	006S022E33F001S		
Latitude:	333639.95	EDR Site id:	USGS3084675
Longitude:	1144102.63	Dec lat:	33.61112153
Dec lon:	-114.68485649	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENWS33 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	334.9	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900926	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-26	Ground water data end date:	2000-01-26
Ground water data count:	3		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-26	86.68		1992-03-28	88.56	
1990-09-26	88.52				

Map ID:	28		
Agency cd:	USGS	Site no:	333639114392601
Site name:	006S022E34H001S		
Latitude:	333639.2	EDR Site id:	USGS3084674
Longitude:	1143926.2	Dec lat:	33.61091324
Dec lon:	-114.65806959	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041118	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	29		
Agency cd:	USGS	Site no:	333637114395001
Site name:	006S022E34G001S		
Latitude:	333637	EDR Site id:	USGS3084657
Longitude:	1143950	Dec lat:	33.61030213
Dec lon:	-114.66468089	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWSWNES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	258.15	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19650724
Date inventoried:	19710713	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	14.	Hole depth:	14.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-13	Ground water data end date:	1971-07-13
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-13	9.90	

Map ID:	28		
Agency cd:	USGS	Site no:	333636114392501
Site name:	006S022E34J001S		
Latitude:	333636	EDR Site id:	USGS3084646
Longitude:	1143925	Dec lat:	33.61002437
Dec lon:	-114.65773623	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NENESES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	258.26	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	1917
Date inventoried:	19711005	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-10-05	Ground water data end date:	1971-10-05
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-10-05		

Note: The well was destroyed (no water level is recorded).

Map ID:	29		
Agency cd:	USGS	Site no:	333636114395701
Site name:	006S022E34L002S		
Latitude:	333636	EDR Site id:	USGS3084651
Longitude:	1143957	Dec lat:	33.61002436
Dec lon:	-114.66662538	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	256.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19460101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	29		
Agency cd:	USGS	Site no:	333636114395201
Site name:	006S022E34K001S		
Latitude:	333636	EDR Site id:	USGS3084650
Longitude:	1143952	Dec lat:	33.61002436
Dec lon:	-114.66523645	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NWNWSES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	258.82	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	1916
Date inventoried:	19711007	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-10-07	Ground water data end date:	1971-10-07
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-10-07		

Note: The well was destroyed (no water level is recorded).

Map ID:	29		
Agency cd:	USGS	Site no:	333636114395001
Site name:	006S022E34K004S		
Latitude:	333635.6	EDR Site id:	USGS3084648
Longitude:	1143950.4	Dec lat:	33.60991325
Dec lon:	-114.664792	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWSES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041118	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	29		
Agency cd:	USGS	Site no:	333636114395002
Site name:	006S022E34K005S		
Latitude:	333635.6	EDR Site id:	USGS3084649
Longitude:	1143950.4	Dec lat:	33.60991325
Dec lon:	-114.664792	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWSES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041118	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	28		
Agency cd:	USGS	Site no:	333636114392701
Site name:	006S022E34J002S		
Latitude:	333635.5	EDR Site id:	USGS3084647
Longitude:	1143926.7	Dec lat:	33.60988548
Dec lon:	-114.65820847	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENESES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030529	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	30		
Agency cd:	USGS	Site no:	333634114394101
Site name:	006S022E34K002S		
Latitude:	333633.7	EDR Site id:	USGS3084634
Longitude:	1143941.1	Dec lat:	33.60938549
Dec lon:	-114.66220858	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWSES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041118	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	37.	Hole depth:	Not Reported
Source of depth data:	owner	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	30		
Agency cd:	USGS	Site no:	333634114394102
Site name:	006S022E34K003S		
Latitude:	333633.7	EDR Site id:	USGS3084635
Longitude:	1143941.1	Dec lat:	33.60938549
Dec lon:	-114.66220858	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWSES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041118	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	31		
Agency cd:	USGS	Site no:	333633114391002
Site name:	006S022E35M004S		
Latitude:	333633.2	EDR Site id:	USGS3084624
Longitude:	1143909.7	Dec lat:	33.60924662
Dec lon:	-114.6534861	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWSWS35 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	259.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030529	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	31		
Agency cd:	USGS	Site no:	333633114391001
Site name:	006S022E35M001S		
Latitude:	333633	EDR Site id:	USGS3084623
Longitude:	1143910	Dec lat:	33.60919106
Dec lon:	-114.65356943	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	260.00	Altitude method:	M
Altitude accuracy:	5.	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19530101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	310	Hole depth:	328
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1962-02-07
Water quality data end date:	1962-02-07	Water quality data count:	1
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1962-02-07	7	

Map ID:	32		
Agency cd:	USGS	Site no:	333633114420001
Site name:	006S022E32K002S		
Latitude:	333633	EDR Site id:	USGS3084626
Longitude:	1144200	Dec lat:	33.609191
Dec lon:	-114.70079305	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	371.8	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19710101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	173
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1971-04-12
Ground water data end date: 2000-01-26
Ground water data count: 4

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-26	124.89		1990-09-21	127.02	
1972-08-01	125.8		1971-04-12	124	

Map ID: 33
Agency cd: USGS
Site no: 333633114430301
Site name: 006S022E31K001S
Latitude: 333633
EDR Site id: USGS3084628
Longitude: 1144303
Dec lat: 33.60919098
Dec lon: -114.71829357
Coor meth: M
Coor accr: S
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 06
State: 06
County: 065
Country: US
Land net: Not Reported
Location map: Not Reported
Map scale: Not Reported
Altitude: 387.7
Altitude method: M
Altitude accuracy: 0.1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flat surface
Site type: Ground-water other than Spring
Date construction: Not Reported
Date inventoried: Not Reported
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: Not Reported
Hole depth: Not Reported
Source of depth data: Not Reported
Project number: Not Reported
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00
Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1971-07-01
Ground water data end date: 2000-02-15
Ground water data count: 5

Ground-water levels, Number of Measurements: 5

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-15	141.45		1992-03-28	143.34	
1990-09-21	143.95		1971-07-15	139.56	
1971-07-01	140.00				

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	34		
Agency cd:	USGS	Site no:	333633114414701
Site name:	006S022E32K004S		
Latitude:	333632.72	EDR Site id:	USGS3084625
Longitude:	1144146.51	Dec lat:	33.60911323
Dec lon:	-114.69704572	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWSES32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	329.7	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900921	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-22	Ground water data end date:	2000-01-26
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-26	82.63		2000-01-24	82.56	
1990-09-23	84.82		1990-09-22	84.92	

Map ID:	32		
Agency cd:	USGS	Site no:	333633114420002
Site name:	006S022E32K005S		
Latitude:	333631.91	EDR Site id:	USGS3084627
Longitude:	1144200.21	Dec lat:	33.60888823
Dec lon:	-114.70085138	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWSES32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	371.8	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20000126	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	31		
Agency cd:	USGS	Site no:	333631114391701
Site name:	006S022E35M003S		
Latitude:	333631.2	EDR Site id:	USGS3084819
Longitude:	1143917.0	Dec lat:	33.60869107
Dec lon:	-114.65551393	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SENWSWS35 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	259.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030529	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	32		
Agency cd:	USGS	Site no:	333630114415801
Site name:	006S022E32K003S		
Latitude:	333630.38	EDR Site id:	USGS3084817
Longitude:	1144158.46	Dec lat:	33.60846324
Dec lon:	-114.70036525	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWSES32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	365.5	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900921	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	382.
Source of depth data:	owner	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-21	Ground water data end date:	1990-09-21
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1990-09-21	121.07	

Map ID:	35		
Agency cd:	USGS	Site no:	333630114400101
Site name:	006S022E34L001S		
Latitude:	333630	EDR Site id:	USGS3084816
Longitude:	1144001	Dec lat:	33.60835773
Dec lon:	-114.66773651	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	330.	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19590101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	360.	Hole depth:	384.
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1961-05-25
Water quality data end date:	1961-05-25	Water quality data count:	1
Ground water data begin date:	1972-08-01	Ground water data end date:	1972-08-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1972-08-01	93.00	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	32		
Agency cd:	USGS	Site no:	333627114420001
Site name:	006S022E32K001S		
Latitude:	333627	EDR Site id:	USGS3084807
Longitude:	1144200	Dec lat:	33.60752438
Dec lon:	-114.70079303	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	362.8	Altitude method:	M
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19530101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	464	Hole depth:	500
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1954-03-12
Water quality data end date:	1967-00-00	Water quality data count:	8
Ground water data begin date:	1953-10-27	Ground water data end date:	2000-01-26
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-01-26					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1990-09-21	118.46		1961-05-23	117	
1953-10-27	112				

Map ID:	36		
Agency cd:	USGS	Site no:	333624114400401
Site name:	006S022E34L003S		
Latitude:	333624	EDR Site id:	USGS3084802
Longitude:	1144004	Dec lat:	33.60669111
Dec lon:	-114.66856984	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	256.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19460101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	12.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	37		
Agency cd:	USGS	Site no:	333609114441501
Site name:	007S021E01C001S		
Latitude:	333619.01	EDR Site id:	USGS3084735
Longitude:	1144414.84	Dec lat:	33.60530494
Dec lon:	-114.73824966	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNENWS01 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	389.02	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1992-11-17	Ground water data end date:	2000-02-16
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel
2000-02-16	144.39	
1992-11-17	145.59	
1992-11-17	145.58	
1992-11-17	145.58	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	38		
Agency cd:	USGS	Site no:	333618114432701
Site name:	006S022E31N001S		
Latitude:	333617.57	EDR Site id:	USGS3084794
Longitude:	1144327.15	Dec lat:	33.60490497
Dec lon:	-114.72500204	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWSWSWS31 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	388.1	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	20000731
Date inventoried:	20001017	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	400.	Hole depth:	415.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	39		
Agency cd:	USGS	Site no:	333615114413201
Site name:	006S022E32R001S		
Latitude:	333615	EDR Site id:	USGS3084785
Longitude:	1144132	Dec lat:	33.60419114
Dec lon:	-114.69301498	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESESES32 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	332.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19470000
Date inventoried:	1971	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	560.	Hole depth:	560.
Source of depth data:	reporting agency (generally USGS)	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1961-05-23
Ground water data end date: 1990-09-22
Ground water data count: 42

Ground-water levels, Number of Measurements: 42

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1990-09-22	89.15		1971-07-01	86.00	
1964-12-02	81.29		1964-10-21	81.21	
1964-09-17	80.93		1964-08-19	81.04	
1964-07-21	81.30		1964-06-18	81.36	
1964-05-12	81.97		1964-04-15	82.15	
1964-03-10	82.66		1964-02-07	82.91	
1963-12-31	82.47		1963-11-27	81.78	
1963-10-29	81.46		1963-09-09	81.58	
1963-08-06	81.85		1963-07-11	82.00	
1963-06-03	82.15		1963-05-06	82.54	
1963-04-01	82.94		1963-03-04	83.24	
1963-02-04	83.29		1963-01-10	83.06	
1962-12-13	83.00		1962-11-08	82.71	
1962-10-11	82.52		1962-09-17	82.35	
1962-08-16	82.62		1962-07-19	82.57	
1962-06-20	82.56		1962-05-24	82.73	
1962-04-24	82.85		1962-03-26	83.15	
1962-02-19	83.35		1962-01-22	83.40	
1961-12-20	83.04		1961-11-21	82.67	
1961-10-18	82.16		1961-09-21	81.96	
1961-08-24	82.17		1961-05-23	82.70	

Map ID: 40
Agency cd: USGS
Site no: 333613114392501
Site name: 006S022E34R002S
Latitude: 333613
EDR Site id: USGS3084777
Longitude: 1143925
Dec lat: 33.60363565
Dec lon: -114.65773615
Coor meth: M
Coor accr: S
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 06
State: 06
County: 065
Country: US
Land net: Not Reported
Location map: Not Reported
Map scale: Not Reported
Altitude: 257.00
Altitude method: L
Altitude accuracy: .1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flood plain
Site type: Ground-water other than Spring
Date construction: Not Reported
Date inventoried: Not Reported
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: Not Reported
Hole depth: 12.0
Source of depth data: Not Reported
Project number: Not Reported
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1971-07-01
Ground water data end date: 1971-07-01
Ground water data count: 1

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	9.00	

Map ID: 41
Agency cd: USGS
Site no: 333612114434001
Site name: 006S021E36R001S
Latitude: 333611.35
EDR Site id: USGS3084772
Longitude: 1144340.83
Dec lat: 33.60317723
Dec lon: -114.72880213
Coor meth: D
Coor accr: H
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 06
State: 06
County: 065
Country: US
Land net: Not Reported
Location map: Not Reported
Map scale: Not Reported
Altitude: 389.09
Altitude method: D
Altitude accuracy: 0.1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flat surface
Site type: Ground-water other than Spring
Date construction: 19460101
Date inventoried: 19610523
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: 636.
Hole depth: 636
Source of depth data: driller
Project number: Not Reported
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00
Peak flow data count: 0
Water quality data begin date: 1954-07-15
Water quality data end date: 1964-05-14
Water quality data count: 3
Ground water data begin date: 1946-05-00
Ground water data end date: 2000-03-29
Ground water data count: 5

Ground-water levels, Number of Measurements: 5

Date	Feet below Surface	Feet to Sealevel
2000-03-29	144.47	
2000-02-23	144.62	
1946-05	138	
2000-02-23	144.62	
1990-09-27	146.64	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	40		
Agency cd:	USGS	Site no:	333611114392401
Site name:	006S022E35N001S		
Latitude:	333611	EDR Site id:	USGS3084762
Longitude:	1143924	Dec lat:	33.60308011
Dec lon:	-114.65745836	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	255.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19360101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	40		
Agency cd:	USGS	Site no:	333610114392401
Site name:	007S022E02D001S		
Latitude:	333610	EDR Site id:	USGS3084749
Longitude:	1143924	Dec lat:	33.60280234
Dec lon:	-114.65745836	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	256.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19180101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	43		
Agency cd:	USGS	Site no:	333610114394001
Site name:	006S022E34R001S		
Latitude:	333610	EDR Site id:	USGS3084751
Longitude:	1143940	Dec lat:	33.60280233
Dec lon:	-114.66190293	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	257.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19250101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	8.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	42		
Agency cd:	USGS	Site no:	333610114401401
Site name:	006S022E34N001S		
Latitude:	333610	EDR Site id:	USGS3084753
Longitude:	1144014	Dec lat:	33.60280232
Dec lon:	-114.67134766	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	255.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	9.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	7.00	

Map ID:	42		
Agency cd:	USGS	Site no:	333610114401001
Site name:	006S022E34P001S		
Latitude:	333610	EDR Site id:	USGS3084752
Longitude:	1144010	Dec lat:	33.60280232
Dec lon:	-114.67023651	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	254.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	44		
Agency cd:	USGS	Site no:	333610114430502
Site name:	007S022E06C002S		
Latitude:	333610	EDR Site id:	USGS3084755
Longitude:	1144305	Dec lat:	33.60280226
Dec lon:	-114.71884906	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	387.	Altitude method:	M
Altitude accuracy:	1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19590101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	44		
Agency cd:	USGS	Site no:	333610114430501
Site name:	007S022E06C001S		
Latitude:	333610	EDR Site id:	USGS3084754
Longitude:	1144305	Dec lat:	33.60280226
Dec lon:	-114.71884906	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	390.	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19690101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	340.	Hole depth:	344.
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	40		
Agency cd:	USGS	Site no:	333610114392601
Site name:	006S022E34R003S		
Latitude:	333609.8	EDR Site id:	USGS3084750
Longitude:	1143926.2	Dec lat:	33.60274678
Dec lon:	-114.65806949	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESESES34 T06S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	262.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	43		
Agency cd:	USGS	Site no:	333609114394301
Site name:	007S022E03B002S		
Latitude:	333609	EDR Site id:	USGS3084732
Longitude:	1143943	Dec lat:	33.60252456
Dec lon:	-114.66273629	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWNES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	257.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	42		
Agency cd:	USGS	Site no:	333609114401301
Site name:	007S022E03D001S		
Latitude:	333609	EDR Site id:	USGS3084733
Longitude:	1144013	Dec lat:	33.60252455
Dec lon:	-114.67106987	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWNWS03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	196703
Date inventoried:	19670330	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	49.	Hole depth:	121.
Source of depth data:	reporting agency (generally USGS)	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1967-03-30	Ground water data end date:	1972-08-02
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1972-08-02	6.9		1968-06-10	7.23	
1967-06-01	4.90		1967-03-30	5.41	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	42		
Agency cd:	USGS	Site no:	333609114401302
Site name:	007S022E03D002S		
Latitude:	333609	EDR Site id:	USGS3084734
Longitude:	1144013	Dec lat:	33.60252455
Dec lon:	-114.67106987	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWNWS03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	260.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19670300
Date inventoried:	19670330	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	20.	Hole depth:	26.
Source of depth data:	reporting agency (generally USGS)	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1967-03-30	Ground water data end date:	1972-08-02
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1972-08-02	11.0		1968-06-10	6.87	
1967-06-01	4.56		1967-03-30	5.13	

Map ID:	43		
Agency cd:	USGS	Site no:	333608114395601
Site name:	007S022E03B003S		
Latitude:	333608.3	EDR Site id:	USGS3084923
Longitude:	1143955.6	Dec lat:	33.60233012
Dec lon:	-114.66623639	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWNES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041119	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	43		
Agency cd:	USGS	Site no:	333608114395603
Site name:	007S022E03B005S		
Latitude:	333608.3	EDR Site id:	USGS3084925
Longitude:	1143955.6	Dec lat:	33.60233012
Dec lon:	-114.66623639	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWNES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041119	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	43		
Agency cd:	USGS	Site no:	333608114395602
Site name:	007S022E03B004S		
Latitude:	333608.3	EDR Site id:	USGS3084924
Longitude:	1143955.6	Dec lat:	33.60233012
Dec lon:	-114.66623639	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWNES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20041119	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	43		
Agency cd:	USGS	Site no:	333608114395001
Site name:	007S022E03B001S		
Latitude:	333607.9	EDR Site id:	USGS3084922
Longitude:	1143949.5	Dec lat:	33.60221901
Dec lon:	-114.66454189	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWNES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	261.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333556114392601
Site name:	007S022E03H011S		
Latitude:	333556	EDR Site id:	USGS3084890
Longitude:	1143926	Dec lat:	33.59891355
Dec lon:	-114.65801388	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	255.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333553114392702
Site name:	007S022E03H006S		
Latitude:	333553.4	EDR Site id:	USGS3084881
Longitude:	1143926.6	Dec lat:	33.59819135
Dec lon:	-114.65818054	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	252.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	45		
Agency cd:	USGS	Site no:	333553114392701
Site name:	007S022E03H005S		
Latitude:	333553.4	EDR Site id:	USGS3084880
Longitude:	1143926.6	Dec lat:	33.59819135
Dec lon:	-114.65818054	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	252.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333553114392703
Site name:	007S022E03H007S		
Latitude:	333553.4	EDR Site id:	USGS3084882
Longitude:	1143926.6	Dec lat:	33.59819135
Dec lon:	-114.65818054	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	252.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	2003-04-24	Ground water data end date:	2003-04-24
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
2003-04-24		

Note: An obstruction was encountered in the well above the water surface (no water level recorded).

Map ID:	45		
Agency cd:	USGS	Site no:	333550114392501
Site name:	007S022E03H004S		
Latitude:	333549.7	EDR Site id:	USGS3084876
Longitude:	1143925.3	Dec lat:	33.5971636
Dec lon:	-114.65781941	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	255.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333547114392501
Site name:	007S022E03H010S		
Latitude:	333547	EDR Site id:	USGS3084874
Longitude:	1143925	Dec lat:	33.59641362
Dec lon:	-114.65773606	Coor meth:	M
Coor accr:	R	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	255.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333546114393002
Site name:	007S022E03H013S		
Latitude:	333545.74	EDR Site id:	USGS3084869
Longitude:	1143929.68	Dec lat:	33.59606362
Dec lon:	-114.6590361	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	255.8	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030528	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	45		
Agency cd:	USGS	Site no:	333546114393001
Site name:	007S022E03H012S		
Latitude:	333545.73	EDR Site id:	USGS3084868
Longitude:	1143929.68	Dec lat:	33.59606085
Dec lon:	-114.6590361	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	255.8	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030528	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333546114392901
Site name:	007S022E03H008S		
Latitude:	333545.7	EDR Site id:	USGS3084866
Longitude:	1143928.6	Dec lat:	33.59605251
Dec lon:	-114.65873609	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	254.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported

Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	45		
Agency cd:	USGS	Site no:	333546114392902
Site name:	007S022E03H009S		
Latitude:	333545.7	EDR Site id:	USGS3084867
Longitude:	1143928.6	Dec lat:	33.59605251
Dec lon:	-114.65873609	Coor meth:	D
Coor accr:	1	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESENES03 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	254.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	20030424	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Unconfined single aquifer	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	46		
Agency cd:	USGS	Site no:	333545114403501
Site name:	007S022E04H002S		
Latitude:	333545	EDR Site id:	USGS3084864
Longitude:	1144035	Dec lat:	33.59585805
Dec lon:	-114.67718107	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	256.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19650101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

Map ID:	47		
Agency cd:	USGS	Site no:	333544114401101
Site name:	007S022E03L001S		
Latitude:	333544	EDR Site id:	USGS3084861
Longitude:	1144011	Dec lat:	33.59558029
Dec lon:	-114.67051421	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	257.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	12.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	46		
Agency cd:	USGS	Site no:	333544114402801
Site name:	007S022E04H001S		
Latitude:	333544	EDR Site id:	USGS3084862
Longitude:	1144028	Dec lat:	33.59558028
Dec lon:	-114.67523657	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	256.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	19470101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	12.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	11.00	

Map ID:	48		
Agency cd:	USGS	Site no:	333543114443901
Site name:	007S021E02J001S		
Latitude:	333543.31	EDR Site id:	USGS3084858
Longitude:	1144437.43	Dec lat:	33.59538853
Dec lon:	-114.74452472	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENESES02 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	388.80	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1990-09-24
Ground water data end date: 1990-09-24
Ground water data count: 1

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1990-09-24	149.25	

Map ID: 49
Agency cd: USGS
Site no: 333543114430501
Site name: 007S022E06L001S
Latitude: 333543.13
EDR Site id: USGS3084857
Longitude: 1144305.45
Dec lat: 33.59533856
Dec lon: -114.71897396
Coor meth: D
Coor accr: H
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 04
State: 06
County: 065
Country: US
Land net: NENESWS06 T07S R22E S
Location map: RIPLEY
Map scale: 24000
Altitude: 389.9
Altitude method: D
Altitude accuracy: 0.1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flat surface
Site type: Ground-water other than Spring
Date construction: Not Reported
Date inventoried: 19900923
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: Not Reported
Hole depth: Not Reported
Source of depth data: Not Reported
Project number: CHI
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00
Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1990-09-23
Ground water data end date: 2000-02-15
Ground water data count: 2

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel
2000-02-15		
	Note: An obstruction was encountered in the well above the water surface (no water level recorded).	
1990-09-23	147.57	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	50		
Agency cd:	USGS	Site no:	333522114410101
Site name:	007S022E04P001S		
Latitude:	333522	EDR Site id:	USGS3085023
Longitude:	1144101	Dec lat:	33.58946932
Dec lon:	-114.68440343	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	310.00	Altitude method:	M
Altitude accuracy:	5.	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19590101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	136	Hole depth:	150
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	1959-08-13
Water quality data end date:	1962-10-22	Water quality data count:	4
Ground water data begin date:	0000-00-00	Ground water data end date:	0000-00-00
Ground water data count:	0		

Ground-water levels, Number of Measurements: 17

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1963-01-09	58.61				
1962-12-13	60.03				
Note: The site was being pumped.					
1962-11-08	60.02				
Note: The site was being pumped.					
1962-10-11	59.86				
Note: The site was being pumped.					
1962-09-17	59.41				
Note: The site was being pumped.					
1962-08-16	59.53				
Note: The site was being pumped.					
1962-07-19	59.65				
Note: The site was being pumped.					
1962-06-21	60.00				
Note: The site was being pumped.					
1962-05-25	59.88				
Note: The site was being pumped.					
1962-04-23	59.87				
Note: The site was being pumped.					
1962-03-26	59.42				
Note: The site was being pumped.					
1962-02-19	59.75				
Note: The site was being pumped.					
1962-01-22	59.22				
Note: The site was being pumped.					
1961-12-20	57.90		1961-11-21	57.55	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1961-10-18	58.53	
Note: The site was being pumped.		
1961-09-25	58.57	
Note: The site was being pumped.		

Map ID:	51		
Agency cd:	USGS	Site no:	333521114413101
Site name:	007S022E05R001S		
Latitude:	333521	EDR Site id:	USGS3085020
Longitude:	1144131	Dec lat:	33.58919154
Dec lon:	-114.692737	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	329.	Altitude method:	M
Altitude accuracy:	5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	Not Reported	Daily flow data begin date:	Not Reported
Daily flow data end date:	Not Reported	Daily flow data count:	Not Reported
Peak flow data begin date:	Not Reported	Peak flow data end date:	Not Reported
Peak flow data count:	Not Reported	Water quality data begin date:	Not Reported
Water quality data end date:	Not Reported	Water quality data count:	Not Reported
Ground water data begin date:	Not Reported	Ground water data end date:	Not Reported
Ground water data count:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	50		
Agency cd:	USGS	Site no:	333520114415601
Site name:	007S022E04Q001S		
Latitude:	333520	EDR Site id:	USGS3085008
Longitude:	1144056	Dec lat:	33.58891378
Dec lon:	-114.68301449	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWSES04 T07S R22E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	275.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	40.
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-05-25	Ground water data end date:	1962-09-17
Ground water data count:	17		

Ground-water levels, Number of Measurements: 18

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1962-09-17	22.62		1962-08-16	22.66	
1962-07-19	22.78		1962-06-21	22.60	
1962-05-25	23.03		1962-04-23	23.09	
1962-03-26	22.32		1962-02-19	22.54	
1962-01-22	22.68		1961-12-20	22.45	
1961-11-21	22.12		1961-10-18	23.26	
1961-09-25	21.76		1961-08-24	22.63	
1961-07-28	22.65		1961-07-06	22.68	
1961-05-25	22.44		1961-05-01	22.00	

Map ID:	52		
Agency cd:	USGS	Site no:	333520114445001
Site name:	007S022E04Q002S		
Latitude:	333520	EDR Site id:	USGS3085010
Longitude:	1144450	Dec lat:	33.5889137
Dec lon:	-114.7480164	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	255.0	Altitude method:	L
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flood plain		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

Map ID:	53		
Agency cd:	USGS	Site no:	333519114402501
Site name:	007S022E03N001S		
Latitude:	333519	EDR Site id:	USGS3084995
Longitude:	1144025	Dec lat:	33.58863602
Dec lon:	-114.67440312	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	254.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19180101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	10.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	9.00	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	54		
Agency cd:	USGS	Site no:	333519114413801
Site name:	007S022E05R002S		
Latitude:	333518.90	EDR Site id:	USGS3084996
Longitude:	1144137.78	Dec lat:	33.58860822
Dec lon:	-114.69462038	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESESES05 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	330.2	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	19960501
Date inventoried:	20000215	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	600.	Hole depth:	617.
Source of depth data:	driller	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1996-05-20	Ground water data end date:	2000-02-15
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-15	86.28		1996-05-20	88	

Map ID:	55		
Agency cd:	USGS	Site no:	333520114444001
Site name:	007S021E02R001S		
Latitude:	333518.71	EDR Site id:	USGS3085009
Longitude:	1144437.39	Dec lat:	33.58855538
Dec lon:	-114.74451352	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SESESES02 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	387.71	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1990-09-24
Ground water data end date: 2000-02-15
Ground water data count: 2

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-15	144.43		1990-09-24	146.22	

Map ID: 55
Agency cd: USGS
Site no: 333518114443701
Site name: 007S021E12D001S
Latitude: 333517.97
EDR Site id: USGS3084987
Longitude: 1144436.54
Dec lat: 33.58834983
Dec lon: -114.7442774
Coor meth: D
Coor accr: H
Latlong datum: NAD27
Dec latlong datum: NAD83
District: 06
State: 06
County: 065
Country: US
Land net: NWNWNWS12 T07S R21E S
Location map: RIPLEY
Map scale: Not Reported
Altitude: 387.58
Altitude method: D
Altitude accuracy: 0.1
Altitude datum: NGVD29
Hydrologic: Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.
Topographic: Flat surface
Site type: Ground-water other than Spring
Date construction: 19650802
Date inventoried: 19660128
Mean greenwich time offset: PST
Local standard time flag: Y
Type of ground water site: Single well, other than collector or Ranney type
Aquifer Type: Not Reported
Aquifer: Not Reported
Well depth: 390.
Hole depth: 611.
Source of depth data: driller
Project number: Not Reported
Real time data flag: 0
Daily flow data begin date: 0000-00-00
Daily flow data end date: 0000-00-00
Daily flow data count: 0
Peak flow data begin date: 0000-00-00
Peak flow data end date: 0000-00-00
Peak flow data count: 0
Water quality data begin date: 0000-00-00
Water quality data end date: 0000-00-00
Water quality data count: 0
Ground water data begin date: 1965-09-03
Ground water data end date: 2000-02-15
Ground water data count: 6

Ground-water levels, Number of Measurements: 6

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-15					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1990-09-22					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1972-08-01	141		1966-10-20	139.46	
1966-01-28	139.15		1965-09-03	130	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	56		
Agency cd:	USGS	Site no:	333517114412501
Site name:	007S022E09D002S		
Latitude:	333516.68	EDR Site id:	USGS3084972
Longitude:	1144123.37	Dec lat:	33.58799157
Dec lon:	-114.69061748	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NWNWNWS09 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	332.18	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900924	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-24	Ground water data end date:	2000-02-18
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-18					
Note: The site was being pumped.					
1990-09-24	95.25				
Note: The site had been pumped recently.					

Map ID:	57		
Agency cd:	USGS	Site no:	333509114413301
Site name:	007S022E08A01S		
Latitude:	333509	EDR Site id:	USGS3084954
Longitude:	1144133	Dec lat:	33.58585829
Dec lon:	-114.69329253	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SENENES08 T07S R22E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	323.	Altitude method:	M
Altitude accuracy:	002	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Alluvial or marine terrace		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900922	Mean greenwich time offset:	PST

Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-22	Ground water data end date:	1990-09-22
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1990-09-22	88.33	

Map ID:	58		
Agency cd:	USGS	Site no:	333505114412701
Site name:	007S022E09D001S		
Latitude:	333505	EDR Site id:	USGS3084950
Longitude:	1144127	Dec lat:	33.58474721
Dec lon:	-114.6916258	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	254.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19570101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	13.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	59		
Agency cd:	USGS	Site no:	333453114442701
Site name:	007S021E12E001S		
Latitude:	333453	EDR Site id:	USGS3084941
Longitude:	1144427	Dec lat:	33.58141391
Dec lon:	-114.74162723	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SESWNWS12 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	380.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	1966
Date inventoried:	19720829	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1972-08-29	Ground water data end date:	1972-08-29
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1972-08-29		

Note: The well was destroyed (no water level is recorded).

Map ID:	60		
Agency cd:	USGS	Site no:	333452114415901
Site name:	007S022E08K001S		
Latitude:	333452	EDR Site id:	USGS3084938
Longitude:	1144159	Dec lat:	33.58113619
Dec lon:	-114.70051491	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	250.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19570101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	10.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	8.00	

Map ID:	61		
Agency cd:	USGS	Site no:	333452114421601
Site name:	007S022E08M001S		
Latitude:	333452	EDR Site id:	USGS3084939
Longitude:	1144216	Dec lat:	33.58113618
Dec lon:	-114.70523727	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	254.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19650101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	12.00	

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	62		
Agency cd:	USGS	Site no:	333427114412601
Site name:	007S022E09N001S		
Latitude:	333427	EDR Site id:	USGS3085079
Longitude:	1144126	Dec lat:	33.57419194
Dec lon:	-114.69134788	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	252.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19360101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	12.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	9.00	

Map ID:	63		
Agency cd:	USGS	Site no:	333428114443701
Site name:	007S021E12N002S		
Latitude:	333426.68	EDR Site id:	USGS3085090
Longitude:	1144436.97	Dec lat:	33.57410299
Dec lon:	-114.74439666	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	SWSWSWS12 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	386.67	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900922	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-22	Ground water data end date:	2000-02-16
Ground water data count:	2		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-16					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1990-09-22					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					

Map ID:	63		
Agency cd:	USGS	Site no:	333427114443601
Site name:	007S021E12N001S		
Latitude:	333426.36	EDR Site id:	USGS3085080
Longitude:	1144437.02	Dec lat:	33.5740141
Dec lon:	-114.74441055	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWSWSWS12 T07S R21E S
Location map:	RIPLEY	Map scale:	Not Reported
Altitude:	385.85	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	191111
Date inventoried:	19610609	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	260.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1944-12-00	Ground water data end date:	2000-02-16
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-16	142.98		1990-09-22	145.03	
1971-07-21					
Note: The site was dry (no water level recorded).					
1944-12	140				

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	64		
Agency cd:	USGS	Site no:	333426114445501
Site name:	007S021E14B001S		
Latitude:	333426.03	EDR Site id:	USGS3085070
Longitude:	1144454.58	Dec lat:	33.57392243
Dec lon:	-114.74928847	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENWNES14 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	384.75	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19610609	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1944-00-00	Ground water data end date:	2000-02-16
Ground water data count:	16		

Ground-water levels, Number of Measurements: 16

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-16					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1990-09-22					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1983-05-26					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1971-07-21					
Note: The site was dry (no water level recorded).					
1963-01-09	139.82		1962-12-13	139.84	
1962-11-08	139.82		1962-10-11	139.82	
1962-09-17	139.70		1962-08-16	139.75	
1962-07-19	139.81		1962-06-20	139.90	
1962-05-24	139.80		1962-02-15	138.00	
1961-06-09	137.06		1944	140	

Map ID:	64		
Agency cd:	USGS	Site no:	333426114445001
Site name:	007S021E14B002S		
Latitude:	333426	EDR Site id:	USGS3085069
Longitude:	1144450	Dec lat:	33.5739141
Dec lon:	-114.74801621	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NENWNES14 T07S R21E S
Location map:	RIPLEY	Map scale:	24000

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Altitude:	385.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19720829	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1972-08-29	Ground water data end date:	1972-08-29
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1972-08-29		

Note: The well was destroyed (no water level is recorded).

Map ID:	65		
Agency cd:	USGS	Site no:	333426114454201
Site name:	007S021E15A001S		
Latitude:	333425.82	EDR Site id:	USGS3085071
Longitude:	1144540.18	Dec lat:	33.57386407
Dec lon:	-114.76195553	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	04
State:	06	County:	065
Country:	US	Land net:	NENENES15 T07S R21E S
Location map:	ROOSEVELT MINE	Map scale:	24000
Altitude:	390.8	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19900923	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	CHI
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1990-09-23	Ground water data end date:	2004-03-02
Ground water data count:	22		

Ground-water levels, Number of Measurements: 22

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-03-02	137.41		2004-03-02	137.40	
2003-11-05	137.25		2003-11-05	137.25	
2003-06-03	137.27		2003-06-03	137.28	
2002-10-02	137.33		2002-10-02	137.32	
2002-04-03	137.39		2002-04-03	137.39	
2001-11-07	137.63		2001-11-07	137.63	
2001-07-11	137.53		2001-07-11	137.53	
2001-04-17	137.50		2001-04-17	137.50	
2001-02-25	139.27		2000-12-14	137.60	
2000-10-04	137.46		2000-03-29	137.40	
1992-03-23	137.73		1990-09-23	137.81	

Map ID:	63		
Agency cd:	USGS	Site no:	333426114443801
Site name:	007S021E14A001S		
Latitude:	333425.76	EDR Site id:	USGS3085068
Longitude:	1144437.89	Dec lat:	33.57384744
Dec lon:	-114.74465222	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NENENES14 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	386.86	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19610215	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	354.
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-06-09	Ground water data end date:	2000-02-16
Ground water data count:	6		

Ground-water levels, Number of Measurements: 6

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2000-02-16					
Note: The site was dry (no water level recorded).					
1990-09-22					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1971-07-01	141.00		1966-10-20	139.20	
1962-02-15	139.20		1961-06-09	139.66	

Map ID:	66		
Agency cd:	USGS	Site no:	333425114420101
Site name:	007S022E17C001S		
Latitude:	333425	EDR Site id:	USGS3085060
Longitude:	1144201	Dec lat:	33.57363638
Dec lon:	-114.70107038	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	252.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	13.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

Map ID:	67		
Agency cd:	USGS	Site no:	333425114423701
Site name:	007S022E18A001S		
Latitude:	333425	EDR Site id:	USGS3085061
Longitude:	1144237	Dec lat:	33.57363637
Dec lon:	-114.71107068	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	251.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	19650101
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	9.00	

Map ID:	63		
Agency cd:	USGS	Site no:	333425114443301
Site name:	007S021E13D001S		
Latitude:	333425	EDR Site id:	USGS3085062
Longitude:	1144433	Dec lat:	33.57363633
Dec lon:	-114.74329384	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	NWNWNWS13 T07S R21E S
Location map:	RIPLEY	Map scale:	24000
Altitude:	386.	Altitude method:	M
Altitude accuracy:	2.5	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19720829	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	Not Reported
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1972-08-29	Ground water data end date:	1972-08-29
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1972-08-29		

Note: The well was destroyed (no water level is recorded).

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Map ID:	68		
Agency cd:	USGS	Site no:	333400114444701
Site name:	007S021E14H001S		
Latitude:	333400.06	EDR Site id:	USGS3085163
Longitude:	1144447.21	Dec lat:	33.56670874
Dec lon:	-114.74724109	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWSENES14 T07S R21E S
Location map:	RIPLEY	Map scale:	Not Reported
Altitude:	379.52	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	196602
Date inventoried:	19660208	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	900.	Hole depth:	1386.
Source of depth data:	driller	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1966-03-01	Ground water data end date:	1990-09-22
Ground water data count:	4		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1990-09-22	137.60		1972-08-01	134.00	
1966-10-20	132.90		1966-03-01	130	

Map ID:	69		
Agency cd:	USGS	Site no:	333359114424601
Site name:	007S022E18J001S		
Latitude:	333359	EDR Site id:	USGS3085147
Longitude:	1144246	Dec lat:	33.56641434
Dec lon:	-114.71357066	Coor meth:	M
Coor accr:	S	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	Not Reported
Location map:	Not Reported	Map scale:	Not Reported
Altitude:	251.00	Altitude method:	L
Altitude accuracy:	.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	Not Reported	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	14.0
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00

Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1971-07-01	Ground water data end date:	1971-07-01
Ground water data count:	1		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1971-07-01	10.00	

Map ID:	70		
Agency cd:	USGS	Site no:	333322114452701
Site name:	007S021E23C001S		
Latitude:	333327.09	EDR Site id:	USGS3085260
Longitude:	1144521.51	Dec lat:	33.55755063
Dec lon:	-114.75676904	Coor meth:	D
Coor accr:	H	Latlong datum:	NAD27
Dec latlong datum:	NAD83	District:	06
State:	06	County:	065
Country:	US	Land net:	SWNENWS23 T07S R21E S
Location map:	ROOSEVELT MINE	Map scale:	Not Reported
Altitude:	383.55	Altitude method:	D
Altitude accuracy:	0.1	Altitude datum:	NGVD29
Hydrologic:	Imperial Reservoir. Arizona, California. Area = 3320 sq.mi.		
Topographic:	Flat surface		
Site type:	Ground-water other than Spring	Date construction:	Not Reported
Date inventoried:	19611010	Mean greenwich time offset:	PST
Local standard time flag:	Y	Type of ground water site:	Single well, other than collector or Ranney type
Aquifer Type:	Not Reported	Aquifer:	Not Reported
Well depth:	Not Reported	Hole depth:	120.
Source of depth data:	Not Reported	Project number:	Not Reported
Real time data flag:	0	Daily flow data begin date:	0000-00-00
Daily flow data end date:	0000-00-00	Daily flow data count:	0
Peak flow data begin date:	0000-00-00	Peak flow data end date:	0000-00-00
Peak flow data count:	0	Water quality data begin date:	0000-00-00
Water quality data end date:	0000-00-00	Water quality data count:	0
Ground water data begin date:	1961-10-10	Ground water data end date:	2000-02-16
Ground water data count:	3		

Ground-water levels, Number of Measurements: 3

Date	Feet below Surface	Feet to Sealevel
2000-02-16		
Note: The site was dry (no water level recorded).		
1990-09-23		
Note: The site was dry (no water level recorded).		
1961-10-10		
Note: The site was dry (no water level recorded).		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Well Information:

Longitude:	-114.693
Latiude:	33.6461
Stwellno:	06S22E20A001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004869

Longitude:	-114.7055
Latiude:	33.6314
Stwellno:	06S22E29D001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004813

Longitude:	-114.7049
Latiude:	33.6289
Stwellno:	06S22E29C001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004805

Longitude:	-114.6802
Latiude:	33.627
Stwellno:	06S22E28H001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004800

Longitude:	-114.6986
Latiude:	33.627
Stwellno:	06S22E29G001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004799

Longitude:	-114.6577
Latiude:	33.6267
Stwellno:	06S22E26E002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004795

Longitude:	-114.6577
Latiude:	33.6267
Stwellno:	06S22E26E001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004794

Longitude:	-114.6983
Latiude:	33.6257
Stwellno:	06S22E29G002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004789

Longitude:	-114.6577
Latiude:	33.6248
Stwellno:	06S22E26E003S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004781

Longitude: -114.6622
Latiude: 33.6248
Stwellno: 06S22E27H001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004780

Longitude: -114.6952
Latiude: 33.6231
Stwellno: 06S22E29J001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004768

Longitude: -114.71
Latiude: 33.6223
Stwellno: 06S22E29M001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004765

Longitude: -114.6597
Latiude: 33.6175
Stwellno: 06S22E27R001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004727

Longitude: -114.6619
Latiude: 33.6175
Stwellno: 06S22E27R002S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004726

Longitude:	-114.7005
Latiude:	33.6175
Stwellno:	06S22E29Q001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004725

Longitude:	-114.6864
Latiude:	33.617
Stwellno:	06S22E33C005S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004718

Longitude:	-114.6871
Latiude:	33.6169
Stwellno:	06S22E33C004S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004717

Longitude:	-114.6675
Latiude:	33.6147
Stwellno:	06S22E34C001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004707

Longitude:	-114.6858
Latiude:	33.6145
Stwellno:	06S22E33C006S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004702

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Longitude:	-114.67
Latiude:	33.6131
Stwellno:	06S22E34F001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004692

Longitude:	-114.7047
Latiude:	33.6131
Stwellno:	06S22E32F001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004691

Longitude:	-114.7207
Latiude:	33.6131
Stwellno:	06S22E31F001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004690

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Water Wells:

Water System Information:

Map ID:	25		
Prime Station Code:	06S/22E-32F02 S	User ID:	WAT
FRDS Number:	3301553001	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	333647.0 1144217.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 06		
System Number:	3301553		
System Name:	Blythe - Airport		
Organization That Operates System:			
	440 South Main Street Blythe, CA 92225		
Pop Served:	40	Connections:	13
Area Served:	Not Reported		

Water System Information:

Map ID:	23		
Prime Station Code:	06S/22E-34J01 S	User ID:	33C
FRDS Number:	3301350001	County:	Riverside
District Number:	63	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	333646.0 1143929.0	Precision:	1,000 Feet (10 Seconds)
Source Name:	WELL 01		
System Number:	3301350		
System Name:	JUNCTION MOTEL		
Organization That Operates System:			
	Not Reported		
Pop Served:	Unknown, Small System	Connections:	Unknown, Small System
Area Served:	Not Reported		
Sample Collected:	12/01/2000	Findings:	2560. US
Chemical:	SPECIFIC CONDUCTANCE		

Longitude:	-114.7052
Latiude:	33.6123
Stwellno:	06S22E32F003S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004681

Longitude:	-114.6833
Latiude:	33.6119
Stwellno:	06S22E33F003S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004675

Longitude:	-114.6858
Latiude:	33.6117
Stwellno:	06S22E33F002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004673

Longitude:	-114.6849
Latiude:	33.6111
Stwellno:	06S22E33F001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004666

Longitude:	-114.6647
Latiude:	33.6103
Stwellno:	06S22E34G001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004660

Longitude:	-114.6536
Latiude:	33.6092
Stwellno:	06S22E35M001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004647

Longitude: -114.7008
Latiude: 33.6092
Stwellno: 06S22E32K002S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004646

Longitude: -114.7183
Latiude: 33.6092
Stwellno: 06S22E31K001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004645

Longitude: -114.6971
Latiude: 33.6091
Stwellno: 06S22E32K004S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004641

Longitude: -114.7004
Latiude: 33.6085
Stwellno: 06S22E32K003S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004635

Longitude: -114.6677
Latiude: 33.6084
Stwellno: 06S22E34L001S
Districtco: 3
Welluseco: Z
Countyco: 33
Gwcode: 703900
Site id: CADW40000004632

Longitude:	-114.7383
Latiude:	33.6053
Stwellno:	07S21E01C001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004608

Longitude:	-114.693
Latiude:	33.6042
Stwellno:	06S22E32R001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004596

Longitude:	-114.6577
Latiude:	33.6036
Stwellno:	06S22E34R002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004588

Longitude:	-114.7288
Latiude:	33.6032
Stwellno:	06S21E36R001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004582

Longitude:	-114.6714
Latiude:	33.6028
Stwellno:	06S22E34N001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004573

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Longitude:	-114.6711
Latiude:	33.6025
Stwellno:	07S22E03D002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004571

Longitude:	-114.6711
Latiude:	33.6025
Stwellno:	07S22E03D001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004570

Water System Information:

Map ID:	44		
Prime Station Code:	07S/22E-06C01 S	User ID:	WAT
FRDS Number:	3310028001	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	333608.0 1144300.0	Precision:	100 Feet (one Second)
Source Name:	WELL 02 - STANDBY		
System Number:	3310028		
System Name:	Riverside CSA #122		
Organization That Operates System:	25871 NEIGHBORS BLVD. RIPLEY, CA 92272		
Pop Served:	1100	Connections:	363
Area Served:	Not Reported		
Sample Collected:	04/10/2006	Findings:	58. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	04/10/2006	Findings:	116. PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	04/10/2006	Findings:	5.91 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	04/10/2006	Findings:	116. PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	04/10/2006	Findings:	5.69 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	09/27/2006	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	09/27/2006	Findings:	250. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2010	Findings:	46. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03/23/2010	Findings:	6.5
Chemical:	PH, LABORATORY		
Sample Collected:	03/23/2010	Findings:	18. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03/23/2010	Findings:	22. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/23/2010	Findings:	10. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03/23/2010	Findings:	3.4 MG/L
Chemical:	CALCIUM		
Sample Collected:	03/23/2010	Findings:	4.1 MG/L
Chemical:	SODIUM		
Sample Collected:	03/23/2010	Findings:	320. UG/L
Chemical:	IRON		
Sample Collected:	03/23/2010	Findings:	36. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		

Water System Information:

Map ID:	44		
Prime Station Code:	07S/22E-06C02 S	User ID:	WAT
FRDS Number:	3310028002	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Destroyed
Source Lat/Long:	333607.0 1144305.0	Precision:	100 Feet (one Second)
Source Name:	WELL 03 - DESTROYED		
System Number:	3310028		
System Name:	Riverside CSA #122		
Organization That Operates System:	25871 NEIGHBORS BLVD. RIPLEY, CA 92272		
Pop Served:	1100	Connections:	363
Area Served:	Not Reported		

Longitude:	-114.6772
Latiude:	33.5959
Stwellno:	07S22E04H002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004507

Longitude:	-114.6577
Latiude:	33.5956
Stwellno:	07S22E03H001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004502

Longitude:	-114.6577
Latiude:	33.5956
Stwellno:	07S22E03H002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004503

Longitude:	-114.6705
Latiude:	33.5956
Stwellno:	07S22E03L001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004501

Longitude:	-114.6752
Latiude:	33.5956
Stwellno:	07S22E04H001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004500

Longitude:	-114.7445
Latiude:	33.5954
Stwellno:	07S21E02J001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004496

Longitude:	-114.719
Latiude:	33.5953
Stwellno:	07S22E06L001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004494

Longitude:	-114.6844
Latiude:	33.5895
Stwellno:	07S22E04P001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004461

Longitude:	-114.683
Latiude:	33.5889
Stwellno:	07S22E04Q001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004450

Longitude:	-114.748
Latiude:	33.5889
Stwellno:	07S22E04Q002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004449

Longitude:	-114.6744
Latiude:	33.5886
Stwellno:	07S22E03N001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004446

Longitude:	-114.6946
Latiude:	33.5886
Stwellno:	07S22E05R002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004445

Longitude:	-114.7445
Latiude:	33.5886
Stwellno:	07S21E02R001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004444

Longitude:	-114.7443
Latiude:	33.5884
Stwellno:	07S21E12D001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004440

Water System Information:

Map ID:	56		
Prime Station Code:	07S/22E-09D01 S	User ID:	WAT
FRDS Number:	3310028003	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	333517.0 1144125.0	Precision:	100 Feet (one Second)
Source Name:	WELL 04		
System Number:	3310028		
System Name:	Riverside CSA #122		
Organization That Operates System:			
	25871 NEIGHBORS BLVD. RIPLEY, CA 92272		
Pop Served:	1100	Connections:	363
Area Served:	Not Reported		
Sample Collected:	09/27/2006	Findings:	180. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		

Sample Collected:	09/27/2006	Findings:	220. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03/26/2007	Findings:	0.2 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	03/26/2007	Findings:	0.54 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	06/25/2007	Findings:	0.158 PCI/L
Chemical:	RADIUM 226 COUNTING ERROR		
Sample Collected:	06/25/2007	Findings:	0.3 PCI/L
Chemical:	RADIUM 226 MDA95		
Sample Collected:	12/10/2007	Findings:	0.76 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	12/10/2007	Findings:	0.15 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	06/23/2008	Findings:	3. UNITS
Chemical:	COLOR		
Sample Collected:	06/23/2008	Findings:	1800. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	06/23/2008	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	06/23/2008	Findings:	150. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	06/23/2008	Findings:	48. MG/L
Chemical:	CALCIUM		
Sample Collected:	06/23/2008	Findings:	7.6 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	06/23/2008	Findings:	350. MG/L
Chemical:	SODIUM		
Sample Collected:	06/23/2008	Findings:	280. MG/L
Chemical:	CHLORIDE		
Sample Collected:	06/23/2008	Findings:	2. MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06/23/2008	Findings:	3.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	06/23/2008	Findings:	160. UG/L
Chemical:	IRON		
Sample Collected:	06/23/2008	Findings:	0.32 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	04/27/2009	Findings:	310. MG/L
Chemical:	SODIUM		
Sample Collected:	10/26/2010	Findings:	0.547 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	10/26/2010	Findings:	0.294 PCI/L
Chemical:	RADIUM 228 MDA95		

Sample Collected:	02/15/2011	Findings:	0.828 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	02/15/2011	Findings:	0.295 PCI/L
Chemical:	RADIUM 228 MDA95		
Sample Collected:	05/17/2011	Findings:	0.517 PCI/L
Chemical:	RADIUM 228 COUNTING ERROR		
Sample Collected:	05/17/2011	Findings:	0.295 PCI/L
Chemical:	RADIUM 228 MDA95		

Longitude:	-114.6906
Latiude:	33.588
Stwellno:	07S22E09D002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004432

Longitude:	-114.6933
Latiude:	33.5859
Stwellno:	07S22E08A001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004414

Longitude:	-114.7416
Latiude:	33.5814
Stwellno:	07S21E12E001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004371

Longitude:	-114.7005
Latiude:	33.5811
Stwellno:	07S22E08K001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004370

Longitude:	-114.7052
Latiude:	33.5811
Stwellno:	07S22E08M001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004369

Longitude:	-114.6914
Latiude:	33.5742
Stwellno:	07S22E09N001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004313

Longitude:	-114.7444
Latiude:	33.5741
Stwellno:	07S21E12N002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004311

Longitude:	-114.7444
Latiude:	33.574
Stwellno:	07S21E12N001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004310

Longitude:	-114.7447
Latiude:	33.5739
Stwellno:	07S21E14A001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004304

Longitude:	-114.748
Latiude:	33.5739
Stwellno:	07S21E14B002S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004303

Longitude:	-114.7493
Latiude:	33.5739
Stwellno:	07S21E14B001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004302

Longitude:	-114.762
Latiude:	33.5739
Stwellno:	07S21E15A001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004301

Longitude:	-114.7011
Latiude:	33.5736
Stwellno:	07S22E17C001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004296

Longitude:	-114.7111
Latiude:	33.5736
Stwellno:	07S22E18A001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004295

Longitude:	-114.7433
Latiude:	33.5736
Stwellno:	07S21E13D001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004294

Longitude:	-114.7472
Latiude:	33.5667
Stwellno:	07S21E14H001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004183

Longitude:	-114.7136
Latiude:	33.5664
Stwellno:	07S22E18J001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004175

Longitude:	-114.7568
Latiude:	33.5576
Stwellno:	07S21E23C001S
Districtco:	3
Welluseco:	Z
Countyco:	33
Gwcode:	703900
Site id:	CADW40000004041

CALIFORNIA GOVERNMENT WELL RECORDS SEARCHED

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Health Services
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

STREET AND ADDRESS INFORMATION

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APPENDIX G
WATER SUPPLY ASSESSMENT

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February 2013

BLYTHE MESA SOLAR PROJECT

Water Supply Assessment

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Water Supply Assessment

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1.0 INTRODUCTION

Senate Bill 610 (SB 610) was passed on January 1, 2002, amending the California Water Code to require detailed analysis of water supply availability for certain types of development projects. The primary purpose of SB 610 is to improve the linkage between water and land use planning by ensuring greater communication between water providers and local planning agencies, and ensuring that land use decisions for certain large development projects are fully informed as to whether sufficient water supplies are available to meet project demands. SB 610 requires the preparation of a Water Supply Assessment (WSA) for a project that is subject to the California Environmental Quality Act (CEQA) and meets certain requirements, each of which is discussed in detail in Section 4 of this WSA.

When a WSA is required per SB 610, it must examine the availability of an identified water supply under normal-year, single-dry-year, and multiple-dry-year conditions over a 20-year projection, accounting for the projected water demand of the proposed project in addition to other existing and planned future uses of the identified water supply, including agricultural and manufacturing uses.

The County of Riverside (as Lead Agency under CEQA) has determined that a WSA shall be prepared to provide full disclosure of potential water resources impacts. Therefore, this WSA for the proposed Blythe Mesa Solar Project (Project) has been prepared in compliance with the California Water Code as amended by SB 610. The steps followed to ensure compliance of this WSA with the California Water Code are described in Appendix A (*DWR Guidebook for Implementation of Senate Bill 610 and Senate Bill 221*).

2.0 PROJECT DESCRIPTION

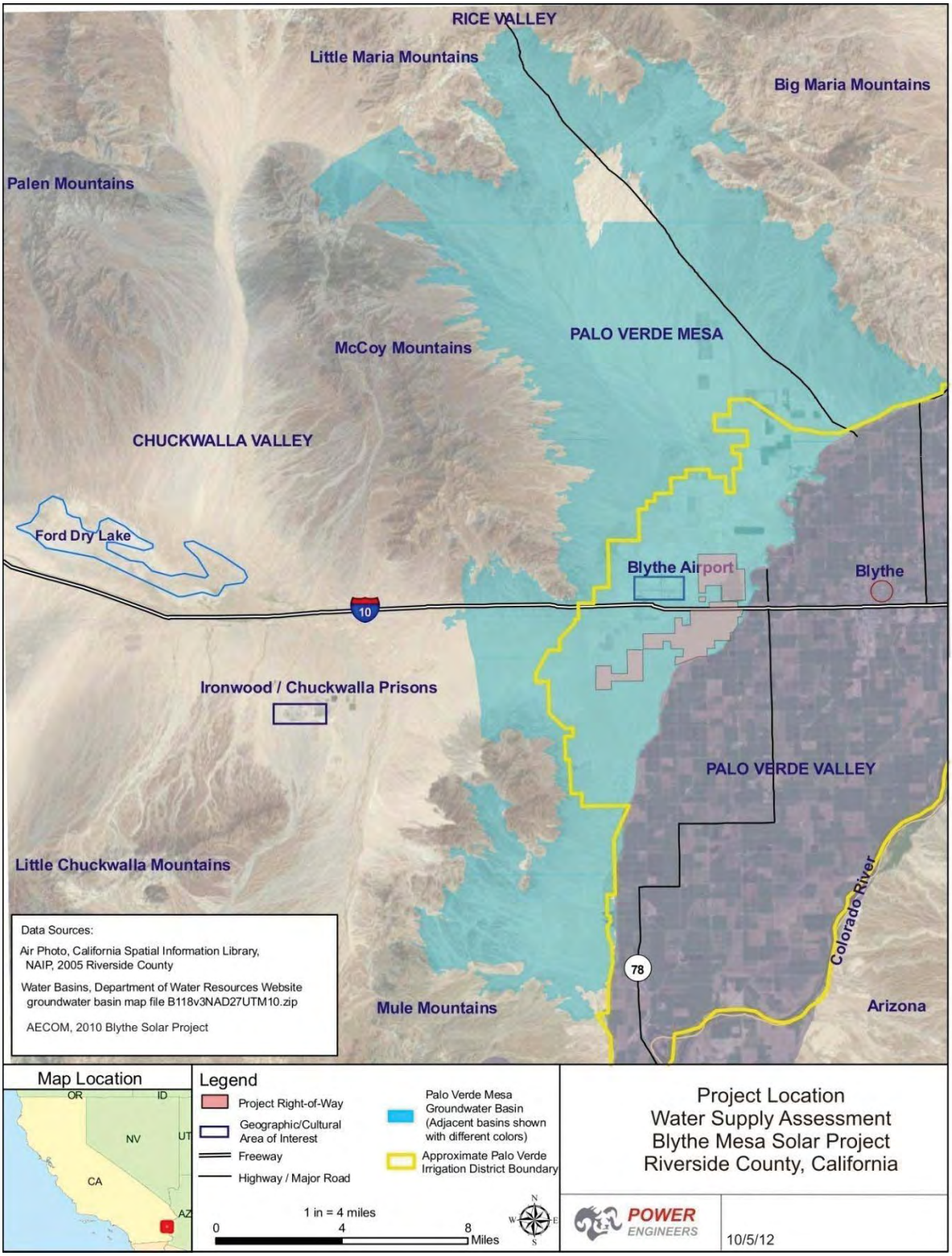
The proposed 485 megawatt (MW) solar photovoltaic (PV) electrical generating facility and associated infrastructure would be located on approximately 3,660 acres in the Palo Verde Mesa region of Riverside County—3,587 acres for the solar field and 73 acres for the 230 kilovolt (kV) transmission line interconnect (Figure 1). The power produced by the Project would be conveyed to the local power grid via interconnection to the Southern California Edison Colorado River Substation, an approved new substation located south of Highway 10 and approximately four miles west of the Project site.

The solar panels, substations, and inverters, electrical equipment, and operations and maintenance (O&M) facilities would be located on lands in private ownership. The 230 kV transmission line would be located on private and public lands.

2.1 Water Requirements

The Project would use water during the construction and operation phases. During the 36-month (3-year) construction period for the proposed Project, approximately 1,354 acre-feet (ac-ft) of water (or about 451 ac-ft per year) would be required. Construction water (non-potable) would be used for dust suppression, concrete manufacturing, and fire safety. During operations, non-potable water would be used for solar array washing, fire water supply, and on-site maintenance activities (such as may be required for landscape maintenance to support dust control). Two O&M buildings would require a total of up to 150 gallons per day of potable water.

FIGURE 1. PROJECT LOCATION



The average total annual water usage for Project operations is estimated to be about 345 ac-ft per year (ac-ft/yr), which corresponds to an average flow rate of about 214 gallons per minute (gpm). Non-potable water for the Project would be taken from the Palo Verde Irrigation District (PVID), which supplies the current irrigation demands of agricultural operations on site. The Project would work with the Gila Farm Land, LLC (the landowner) and the PVID for non-potable water services and supply during construction and operation. The water supplies used for agricultural irrigation and the water supplies underlying the Project site (Palo Verde Mesa Groundwater Basin [PVMGB]) are under the jurisdiction of the PVID. Riverside County Community Service Area #122 (CSA #122) has issued a will-serve letter for the Project's limited potable water needs.

3.0 SOURCES OF WATER SUPPLY

3.1 Palo Verde Groundwater Basin

The basin is bounded by non-water-bearing rocks of the Big Maria and Little Maria Mountains on the north, of the McCoy and Mule Mountains on the west, of the Palo Verde Valley on the east, and of the Palo Verde Mountains on the south (DWR 1979; Jennings 1967). The northwest boundary and parts of the western boundary are drainage divides (Metzger 1973; Jennings 1967). The valley between the McCoy and Big Maria Mountains is drained by McCoy Wash, which flows into the western side of the Palo Verde Valley. Average annual precipitation ranges up to six inches.

3.1.1 Basin Characteristics

The primary source of groundwater in the basin is found in alluvial deposits of Quaternary age. The alluvium generally consists of lenticular beds of sand, gravel, silt, and clay, except near the mountains, where it consists principally of coarse-grained angular rock detritus (DWR 1979). Other water-bearing deposits at the site are the Bouse Formation and a fanglomerate deposit (Metzger 1973). The lithologies of the groundwater-bearing units are described below.

Alluvium. The alluvial deposits range in age from Pliocene to Holocene, compose the shallow floodplain aquifer, and are the principal source of groundwater in the basin (Owen-Joyce 1984). The alluvium is composed of sand, silt, and clay with lenses of gravel, and ranges in thickness from 160 to 600 feet. Most wells in the basin are screened in the coarser-grained alluvial deposits and have moderate to high yields (Metzger 1973).

Bouse Formation. The upper Miocene to Pliocene age Bouse Formation underlies the alluvial deposits. Few wells produce from the formation except near the City of Blythe. The upper Bouse Formation ranges from 500 to 600 feet below land surface and consists of interbedded clay, silt, and sand. The upper Bouse Formation is considered an aquifer, while the lower formation is considered an aquitard. Well yields can vary depending on the degree of formation consolidation and stratigraphic location of the perforations (Metzger 1973).

Fanglomerate. A Miocene (?) age fanglomerate is considered a water-bearing deposit, though no wells are known to have been completed in it because of its relative depth to other water-bearing deposits. Estimated depth to the top of the fanglomerate can be greater than 800 feet below land surface but varies widely throughout the basin (Metzger 1973).

Restrictive barriers have not been identified within the Palo Verde Mesa aquifer that would potentially inhibit groundwater flow (DWR 1979).

3.1.2 Recharge and Storage Capacity

Sources of recharge to the PVMGB are irrigation, precipitation, and underflow from adjacent areas, including the Rice and Chuckwalla Valleys (Metzger 1973). More recent information by the California Department of Water Resources (DWR) suggests that recharge of the basin is chiefly from percolation of runoff from the surrounding mountains, with percolation of precipitation to the valley floor and subsurface inflow as contributing additional sources of recharge (DWR 1979).

Subsurface inflow from the Chuckwalla Valley Groundwater Basin (CVGB) was estimated by Metzger (1973) to be 400 ac-ft/yr. This calculation was based on a cross-sectional profile of the boundary between the two basins derived using geophysical methods and regional data regarding groundwater gradients and hydraulic conductivity. Woodward Clyde (1986, as cited in the California Energy Commission [CEC] Revised Staff Assessment [RSA] for the Blythe Solar Power Project, June 2010) revised this estimate based on the results of pump testing at Chuckwalla State Prison and calculated the basin inflow from CVGB to be 870 ac-ft/yr. Engineering Science (1990, as cited in the CEC RSA 2010) updated this estimate to 1,162 ac-ft/yr, presumably as a result of return flow from prison wastewater disposal; however, the rationale for this adjustment was not provided. Using more recent gravity data, Wilson and Owens-Joyce (1994) found that the area through which discharge occurs is significantly more limited than previously thought due to the presence of a buried bedrock ridge. As a result, the most recent available water budget for the basin has adopted an inflow rate from the CVGB of 400 ac-ft/yr (Eagle Crest 2009).

Natural recharge in the basin was estimated to be approximately 800 ac-ft/yr (DWR 1975). Recharge from infiltration was estimated at 718 ac-ft/yr assuming an infiltration rate of 10% of runoff based on the 2010 CEC study for the Solar Millennium project. Infiltration directly by precipitation is likely limited due to evaporation as described by Metzger (1973). The recharge estimates of 800 and 718 ac-ft/yr are both over-estimates due to the extremely arid conditions and relationship between evaporation and infiltration. Direct recharge from rainfall is an insignificant amount compared to the amount that is recharged from runoff (Metzger 1973). Possible opportunity for recharge to the aquifer from runoff exists in the ephemeral washes during larger storm events. Much of the runoff from the mountains, upon leaving the bedrock, infiltrates into the sand and gravel; eventually, part of the water recharges the groundwater supply (Metzger 1973). It is more likely that only approximately one-third of the originally estimated 800 ac-feet/yr will be available for recharge.

Recharge from applied irrigation water diverted from the Colorado River through the Palo Verde Irrigation District is unknown; however, additional water for irrigation is allowed to be used for salt control in irrigation applications. The additional water for salt control is believed to percolate to groundwater as recharge.

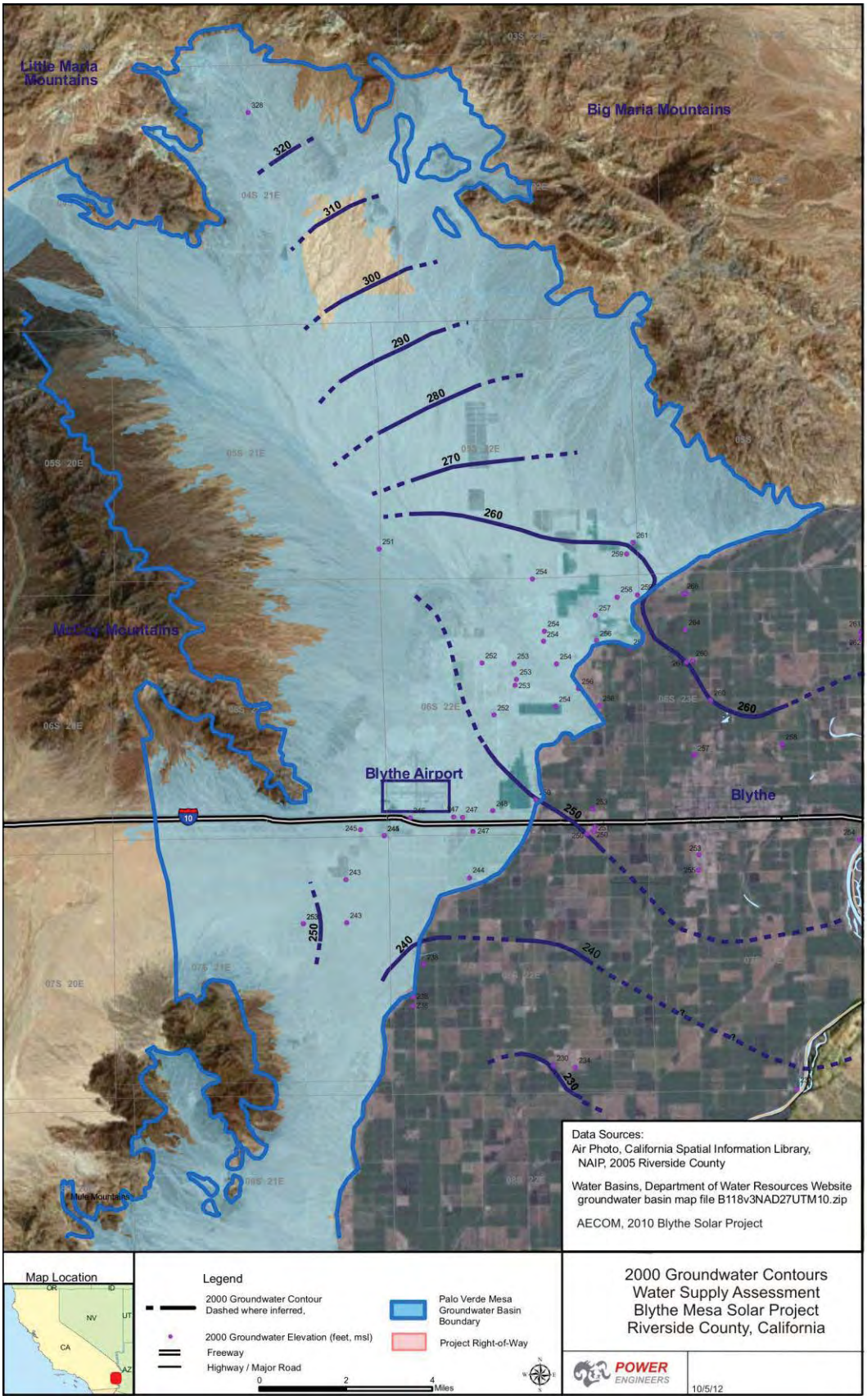
The estimated total groundwater storage capacity for the Palo Verde Mesa Groundwater Basin is estimated at 6,840,000 ac-ft (DWR 1975).

The actual discharge from the PVMGB is not known; however, it is reasonable to assume that the discharge for agriculture use has, in the past, exceeded the recharge from other sources. None of the wells located at or around the Project site are currently being used. Large cones of depression in the potentiometric surface under the Palo Verde Mesa have now recovered as the water table has rebounded with the lack of groundwater extraction. The absence of significant changes in water level data in the PVMGB over time suggests a buffering effect from another source of recharge. However, due to existing and planned extractions such as the Blythe Energy Project, the PVMGB may experience an overdraft condition.

3.1.3 Historic Groundwater Trends

Groundwater levels at the Project site historically range from 215 to 253 feet above mean sea level (approximately 150 feet below ground surface). Wells within and around the Project boundaries have sporadic water level records available from the U.S. Geological Survey (USGS) National Water Information System dating back to 1943. Figure 2 shows the contoured regional groundwater potentiometric surface based on USGS water levels collected during 2000. Groundwater measurements collected during 2000 provided the most complete areal data set for the PVMGB. The contoured data suggests that groundwater flows in a southeasterly direction to the north of the Project site. The groundwater flow direction changes to a southwesterly direction at the Project site roughly parallel to the Palo Verde Valley trend.

FIGURE 2. 2000 GROUNDWATER CONTOURS



3.1.4 Water Budget and Safe Yield

A "water budget" is the comparison of all inflow/recharge to all outflow/demand from a specified groundwater basin, while "safe yield" is the amount of groundwater that can be withdrawn on a sustained basis without impairing groundwater quality or otherwise resulting in environmental damage.

Surface-water diversions at Palo Verde Dam into the Palo Verde Valley for crop irrigation during 1981 through 1984 averaged about 1,000,000 ac-ft/yr (Owen-Joyce 1984). About half of this diverted water returned to the river by natural drainage or via a drainage system that is hydraulically connected to the shallow aquifer. The remaining diverted water is taken up by consumptive use, pumpage, infiltration, and evaporation (Owen-Joyce 1984).

3.1.5 Groundwater Irrigation Demand/Surface Outflow

In 2003, the PVID reported that 544 acres within its service area and an estimated 300 acres outside its service area irrigate with groundwater on the Palo Verde Mesa (CEC 2005). PVID reports that there were 3,911 ac-ft of water provided to irrigate 768 acres on the Palo Verde Mesa in 2010. For this analysis, it is assumed that most of the 3,911 ac-ft of water were used for the citrus trees and a portion of the irrigation water was lost through evaporation. The excess irrigation water not used by the crops and lost through evaporation is believed to percolate into the soils to help control salts and eventually infiltrate to groundwater. The volume of water that infiltrates to groundwater is relatively low based on the crop type and evaporation rates. It is assumed in this analysis that approximately 1.8% or 72 ac-ft of irrigation water will percolate to groundwater based on the citrus crops and the climate conditions.

The Blythe area receives precipitation ranging from 0 to 8.7 inches annually based on historic records from 1913 to 2012. The average annual precipitation rate is approximately 3.5 inches based on this time period. Direct recharge from rainfall is an insignificant amount compared to the amount that is recharged from runoff (Metzger 1973). The recharge from runoff will only occur during the larger storm events. A model to predict the amount of infiltration from runoff would be very complex, with a high amount of uncertainty. For this analysis, it is simply assumed that the recharge basin is approximately 130 square miles and receives an average of 3.5 inches of precipitation per year. The total estimated precipitation volume in the basin during a year would be approximately 24,266 ac-ft, assuming the total 3.5 inches of rain. It is assumed that only 1% (242 ac-ft) of this water will infiltrate to groundwater during the larger storm events mainly affecting the larger washes.

Subsurface inflow from the CVGB was estimated by Metzger (1973) to be 400 ac-ft/yr. This calculation was based on a cross-sectional profile of the boundary between the two basins derived using geophysical methods and regional data regarding groundwater gradients and hydraulic conductivity. Using more recent gravity data, Wilson and Owens-Joyce (1994) found that the area through which discharge occurs is significantly more limited than previously thought due to the presence of a buried bedrock ridge. As a result, the most recent available water budget for the basin has adopted an inflow rate from the CVGB of 400 ac-ft/yr (Eagle Crest 2009).

Subsurface inflow from the McCoy Wash drainage area has been estimated for this analysis using the Darcian flow through a cross-section area of the wash. A gradient of 0.001 and a hydraulic conductivity of 10 feet/day produced a generalized estimate of approximately 175 ac-ft/year as underflow.

There is currently no groundwater extraction from wells at the Project site. Groundwater is being extracted by Blythe Energy for use at the power plant located on Buck Road. The power plant has a

reported operational use of approximately 3,000 ac-ft/yr. Groundwater is being extracted from a well to provide water for the Mesa Bluff Village, the municipal golf course, and the community college on the eastern edge of the PVMGB. Groundwater pumping rates were not provided by the City of Blythe for this well. For this analysis, it is assumed that groundwater pumped from this well is being extracted mainly from the adjacent Palo Verde Valley Aquifer immediately to the east. Table 1 lists the total estimated inflow to the PVMGB minus the reported groundwater extraction on the mesa using the available estimated water volumes.

Table 1. Water Budget for the Palo Verde Mesa Groundwater Basin

BUDGET COMPONENTS	PALO VERDE MESA GROUNDWATER BASIN
Recharge from runoff infiltration (1%)	242 ac-ft/yr
Underflow from Chuckwalla Valley Groundwater Basin	400 ac-ft/yr
Underflow from McCoy Wash	175 ac-ft/yr
Irrigation Return Flow (1.8% of 3,911 ac-ft [2010])	72 ac-ft/yr
Total Inflow	***889*** ac-ft/yr
Groundwater Extraction (wells)	0 ac-ft/yr
Blythe Energy	3,000 ac-ft/yr
Total Outflow	***3,000*** ac-ft/yr
Budget Balance (Inflow-Outflow)	**-2,111** ac-ft/yr

3.1.6 Water Quality

Water quality data from local irrigation wells is not available. However, water quality information for wells serving the Blythe Energy Project located adjacent to the Project site show total dissolved solids (TDS) of about 1,010 milligrams per liter (mg/L). Hardness is about 140 mg/L and silica concentration is about 24 mg/L. The quality of water from these wells has been used in this preliminary evaluation. No information is available on arsenic concentrations from the sampled wells.

3.1.7 Water Rights and Adjudication

The Project site is in Riverside County and the Palo Verde Mesa in an area that has no perennial streams. All lands containing solar panels are privately held by the Applicant. A 4.5-mile portion of the 230 kV transmission line would be located on federal land, though no water use (outside of construction) would occur on the federal portion. A contract for irrigation water supply is held by the applicant and is currently used to grow citrus on the Project site.

3.1.8 Groundwater Management

The California Water Code allows any local public agency that provides water service, whose service area includes a groundwater basin or portion thereof that is not subject to groundwater management pursuant to a judgment or other order, to adopt and implement a groundwater management plan (California Water Code Sections 10750 et. seq.). Groundwater Management Plans often require reports of pumping and some restrictions on usage.

The City of Blythe, California, has an Urban Water Management Plan (UWMP). A small portion of the Project is within the City of Blythe. The Project site is also within the PVID.

3.2 Palo Verde Irrigation District Surface Water

A portion of the Mesa area lies within boundaries of the PVID. Colorado River water, supplied through PVID canals, is lifted onto the Mesa by private pumps to irrigate a portion of the acreage in the PVID. The remaining Mesa irrigated acreage is irrigated from deep wells developed by the

landowners. However, there are no wells supporting agricultural operations on the Project site. The predominant crop on the Mesa is citrus. Based on year 2010 data from PVID, approximately 12,000 ac-ft of water from the PVID surface delivery system was used to irrigate crops on the project site.

The PVID water supply is derived from its Colorado River contract. The PVID holds the Priority 1 rights to California's share of Colorado River water, and a shared portion of the Priority 3 rights, and their rights are not quantified by volume. Rather, the PVID's water use is defined by the irrigation water needed to serve a total of 104,500 acres in the Palo Verde Valley, and an additional 16,000 acres on the Palo Verde Mesa. The City of Blythe is within the PVID boundary and is using the PVID water rights to the Colorado River water.

4.0 WATER SUPPLY PLANNING UNDER SB 610

SB 610 was passed in 2002 and amended the California Water Code by requiring a WSA to be completed for certain projects subject to CEQA, as discussed below in Sections 4.1 and 4.2. California Water Code, as amended by SB 610, requires that when a WSA is required it must address the following questions:

- Is there a public water system that will service the proposed project (see Section 4.3);
- Is there a current UWMP that accounts for the project demand (see Section 4.4);
- Is groundwater a component of the supplies for the project (see Section 4.5); and
- Are there sufficient supplies to serve the project over the next twenty years (see Section 4.6)?

The primary question to be answered in a WSA is:

> *Will the total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection meet the projected water demand of the proposed project, in addition to existing and planned future uses of the identified water supplies, including agricultural and manufacturing uses?*

The following sections address the SB 610 WSA questions as they relate to the proposed Project. Conclusions in Section 5 provide a detailed discussion of the steps followed in preparation of this WSA to ensure compliance with SB 610 and the California Water Code.

Is the proposed Project subject to CEQA?

California Water Code Section 10910(a) states that any city or county that determines that a project, as defined in Section 10912, is subject to CEQA, which applies to projects requiring an issuance of a permit by a public agency, projects undertaken by a public agency, or projects funded by a public agency. The proposed Project requires issuance of permits by a public agency and is, therefore, subject to CEQA.

Is the proposed project a "Project" under SB 610?

California Water Code Section 10912(a) states that any proposed action that meets the definition of "Project" under SB 610 is required to prepare a WSA to demonstrate whether sufficient water supplies are available to meet requirements of the proposed project under normal and drought conditions. SB 610 defines a "Project" as any one of six different development types with certain water use requirements, as specified in the Water Code revised by SB 610. Each identified development type and associated water requirement are addressed below. Any mixed-use project that incorporates one of the six development types described below is also defined as a "Project" under SB 610.

Residential Development
A proposed residential development of more than 500 dwelling units is defined as a "Project" under SB 610. The proposed Project is not a residential development.

Shopping Center or Business Establishment
A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space is defined as a "Project" under SB 610. The proposed Project is not a shopping center or residential development.

Commercial Office Building
A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space is defined as a "Project" under SB 610. The proposed Project is not a commercial office building.

Hotel or Motel
A proposed hotel or motel, or both, having more than 500 rooms is defined as a "Project" under SB 610. The proposed Project is not a hotel or motel.

Industrial, Manufacturing, or Processing Plant or Industrial Park
A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area, is defined as a "Project" under SB 610. Additionally, PV solar and wind energy projects are exempt from preparation of a WSA if they are less than 75 acres in size.

Based on the definition of "Project" as presented above, the proposed solar Project is both larger than 40 acres and meets the intent of the definition, and is greater than 75 acres and would not qualify for a SB 267 exemption. Consequently, the County of Riverside, as the CEQA Lead Agency for the proposed Project, has directed that a WSA for the proposed Project be prepared.

Equivalent Water Use
A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project is defined as a "Project" under SB 610. Assuming that an average household of 3.5 people requires 1.2 ac-ft/yr (AVEK 2008), a 500-dwelling-unit project would require approximately 600 ac-ft/yr. As described in Section 2.1 (see "Water Requirements"), the proposed Project would require approximately 1,354 ac-ft (451 ac-ft/yr) during the three-year construction period and approximately 345 ac-ft/yr during operations and maintenance.

Is there a public water system that will service the proposed project?

No; the great majority of water for the proposed Project (i.e., all of the non-potable water) would not be delivered by a public water system or using public water system connections. The proposed Project would use existing water infrastructure that currently delivers irrigation water from the PVID. CSA #122 has provided a will-serve letter for the small amount (up to 150 gallons per day) of potable water for the two O&M buildings.

Is there a current UWMP that accounts for the project demand?

The City of Blythe, California has a UWMP, but this plan is potentially applicable to a small portion of the Project site that lies within the city limits.

Is groundwater a component of the supplies for the project?

No; groundwater is not a component of the supplies for the Project. The proposed Project would use Colorado River water diversions from the PVID water system.

Are there sufficient supplies to serve the project over the next twenty years?

Yes; as demonstrated through the data and discussions provided in this section, sufficient water supplies are available to serve the Project over a twenty-year future projection, including with consideration to average-year, single-dry year, and multiple-dry year (drought) conditions.

4.2 Project and Non-Project Water Demands

Water demands of the proposed Project, assuming the Project would utilize PVID surface water, are described below, in order to characterize water supply availability.

Project Demands (Groundwater)

This analyses looks specifically at the operational potable water supply demand that would be derived from groundwater sources. The Project use of PVID water for construction and operations is not expected to provide localized recharge to groundwater since most of the water would evaporate during and after use. The projected scenario using the PVID water source (potable water supplied through CSA #122) with no infiltration recharge rates for the Project is shown in Table 2. The estimated inflow for the PVMGB is compared to the past irrigation needs compared to the Project use for a 20-year period.

Table 2. Twenty-year Comparison of Groundwater Inflow and Loss of Recharge in Ac-ft/Yr for the PVMGB with Construction of the Blythe Mesa Solar Project

	2012[1]	2013	2014	2015	2016	2016-2033 ANNUALLY
SUPPLY						
PVMGB Total Inflow (acre feet)	**817**	**817**	**817**	**817**	**817**	**817**
Irrigation Recharge (*Based on 2010 Reported Volume*)	72	0	0	0	0	0
DEMAND						
Recharge from Blythe Mesa Solar Project		0	0	0	0	0
Blythe Energy	3,000	3,000	3,000	3,000	3,000	3,000
Blythe Mesa Solar Project Groundwater Use (potable demand)	0	0	0	0	<1	<1
Total Yearly Demand	3,000	3,000	3,000	3,000	3001	3001
Supply/Demand Difference (Inflow-Outflow)	***-2,183***	***-2,183***	***-2,183***	***-2,183***	***-2,184***	***-2,184***

[1] Groundwater inflow-outflow prior to start of project.

The Blythe Mesa Solar Project would only use groundwater for minimal potable uses; however, the Blythe Energy Center, located to the west of the Project site, reports the use of approximately 3,000 ac-ft/yr as outlined in the 2010 City of Blythe UWMP.

Table 3 shows groundwater demand during years with normal recharge from precipitation compared to three multiple years with no recharge from precipitation.

Table 3. Groundwater Supply and Demand Conditions in Ac-ft/Yr Comparing Normal Precipitation Recharge and Multiple Dry Years

	2016	2017	2018	2019	2020
SUPPLY	**SUPPLY NORMAL YEARS**		**DRY YEARS**		
PVMGWB Total Inflow	817	817	575	575	575
DEMAND					
Groundwater Recharge from Project Site	0	0	0	0	0
Blythe Mesa Solar Project Groundwater Use	<1	<1	<1	<1	<1

Blythe Energy	3,000	3,000	3,000	3,000	3,000
Supply/Demand Difference (Inflow-Outflow)	-2,184	-2,184	-2,426	-2,426	-2,426

The groundwater basin may have overdraft conditions caused by projects that plan to extract water for wells during multiple drought years. The extraction of 3,000 ac-ft/yr is likely developing a cone of depression that would change groundwater flow directions. Groundwater flow direction changes caused by groundwater extraction on the Palo Verde Mesa during drought conditions might redirect gradients to the extent that the Palo Verde Valley Aquifer to the east would possibly provide recharge along its western boundary.

Additional groundwater extraction rates of 3,289 ac-ft/yr are proposed for the Blythe Energy II project located adjacent to the existing Blythe Energy power plant. The Blythe Energy II project would, along with the existing power plant, use a combined total groundwater extraction rate of 6,289 ac-ft/yr.

Project Demands (Surface Water)

The proposed Project would use a fraction of the water supply that is presently used for irrigation demand on the Project site. The present use at the Project site of about 12,000 ac-ft/yr of water used to irrigate agriculture would be reduced to approximately 451 ac-ft/yr of non-potable use during the three-year construction period and 345 ac-ft/yr of non-potable use during operations. Since the existing water used under the PVID's water right would be used for the Project, no new source of water would be required. Therefore, the Project does not represent a new demand for water supply, but converts the existing agricultural irrigation use to the proposed solar Project. Based on the existing water right, sufficient supply is available to serve the Project over a 20-year period.

5.0 CONCLUSIONS

Based on the conditions described above, water supply from PVID sources is sufficient to meet requirements of the proposed Project, including the minor potable groundwater demand under average-year, single-dry year, and multiple-dry year conditions over a 20-year future projection. Conclusions regarding water supply availability are summarized below.

- The existing water supply that is delivered to the project site through the PVID delivery facilities would be used to meet future non-potable Project water demands, which would be much less than the current agricultural irrigation use of about 12,000 ac-ft/yr.

- Less than 1 ac-ft of groundwater per year would be required for potable use in the two Operations and Maintenance buildings. CSA #122 has substantiated its intention to provide this potable supply by issuing a will-serve letter.

- Anticipated water supply management strategies for the Project will ensure adequate supply availability for the Project's anticipated water needs.

This Water Supply Assessment is in compliance with the requirements of the California Water Code, as amended by Senate Bill 610. Appendix A provides a detailed description of the steps followed to prepare this WSA.

6.0 REFERENCES

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Owen-Joyce, S.J. 1984. A Method for Estimating Ground-Water Return Flow to the Colorado River in the Palo Verde-Cibola Area, California and Arizona. U.S. Geological Survey. Water-Resources Investigations Report 84-4236. 48 p.

Wilson, R.P., and S.J. Owen-Joyce. 1994. Method to Identify Wells that Yield Water that will be replaced by Colorado River Water in Arizona, California, Nevada, and Utah.

APPENDIX A: DWR GUIDEBOOK FOR IMPLEMENTATION OF SENATE BILL 610 AND SENATE BILL 221

The Water Supply Assessment (WSA) for the proposed Blythe Mesa Solar Project (proposed Project) was prepared using guidance contained in the California Department of Water Resources' (DWR) *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001* (DWR Guidebook). The California DWR prepared the Guidebook to assist water suppliers in preparation of the water assessments and the written verification of water supply availability required by Senate Bill 610 and SB 221; the DWR has no regulatory or permitting approval authority concerning water assessments or verifications of sufficient water supply, and provides the Guidebook purely as an assistance tool (DWR 2003). The following table provides a detailed description of how the DWR Guidebook was used in preparing the proposed Project's WSA.

DWR Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 (DWR, 2003*)

Guidelines Section Number and Title (DWR, 2003*)	Guidelines Direction	Relevant WSA Section and Response
Section 1 (page 2). Does SB 610 or SB 221 apply to the proposed project?	*Is the project subject to SB 610?* Is the project subject to CEQA (Water Code §10910(a))? If yes, continue.	WSA Section 4 Yes, the Project is subject to CEQA.
	Is it a "Project" as defined by Water Code §10912(a) or (b)? If yes, to comply with SB 610 go to Section 2, page 4.	WSA Section 4 Yes, the proposed Project is considered to meet the definition of "Project" per Water Code §10912(a) or (b). However, a WSA was prepared for the purpose of being conservative.
	Is the project subject to SB 221? Does the tentative map include a "subdivision" as defined by Government Code §66473.7(a)(1)? If no, stop.	No, the proposed Project does not include a "subdivision"; SB 221 does not apply to the proposed Project, and no further action relevant to SB 221 is required.
Section 2 (page 4). Who will prepare the SB 610 analysis?	*Is there a public water system ("water supplier") for the project (Water Code § 10910(b))? If no, go to Section 3, page 6.*	WSA Section 4 Yes, there is a public water system present that could be used to meet the proposed Project's small potable water supply requirements.
Section 3 (page 6). Has an assessment already been prepared that includes this project?	*Has this project already been the subject of an assessment (Water Code §10910(h))? If no, go to Section 4, page 8.*	No, the proposed Project has not been the subject of an assessment.
Section 4 (page 8). Is there a current Urban Water Management Plan?	*Is there an adopted urban water management plan (Water Code §10910(c))? If yes, continue. If yes, information from the UWMP related to the proposed water demand for the project may also be used for carrying out Section 5, Steps 1 and 2, and Section 7; proceed to Section 5, page 10 of the Guidelines.*	Yes, the City of Blythe, California has a UWMP, but it is not anticipated that the City will supply water to the Project.
	Is the projected water demand for the project accounted for in the most recent UWMP (Water Code §10910(c)(2))? If no, go to Section 5, page 10.	No. The water for the Project will come from the Palo Verde Irrigation District.
Section 5 (page 10). What information should be included in an assessment?	*Step One (page 13). Documenting wholesale water supplies.*	The proposed Project does not include the use of any wholesale water supplies.

Guidelines Section Number and Title (DWR, 2003*)	Guidelines Direction	Relevant WSA Section and Response
	Step Two (page 17). Documenting Supply if Groundwater is a Source.*	Groundwater extraction is not presently proposed as the Project's water supply.
	a) Specify if a groundwater management plan or any other specific authorization for groundwater management for the basin has been adopted and how it affects the water supplier's use of the basin.	WSA Section 3 No comprehensive groundwater management plan currently exists for the Palo Verde Mesa Groundwater Basin.
	b) The description of the groundwater basin may be excerpted from the groundwater management plan, from DWR Bulletin 118, California's Ground Water, or from some other document that has been published and that discusses the basin boundaries, type of rock that constitutes the aquifer, variability of the aquifer material, and total groundwater in storage (average specific yield times the volume of the aquifer).	WSA Chapter 3 (Palo Verde Mesa Groundwater Basin) of the WSA provides a description of the groundwater basin characteristics using all available resources.
	c) In an adjudicated basin the amount of water the urban supplier has the legal right to pump should be enumerated in the court decision.	WSA Chapter 3 The Palo Verde Mesa Groundwater Basin is currently non-adjudicated.
	d) The Department of Water Resources has projected estimates of overdraft, or "water shortage," based on projected amounts of water supply and demand (basin management), at the hydrologic region level in Bulletin 160, California Water Plan Update. Estimates at the basin or sub basin level will be projected for some basins in Bulletin 118. If the basin has not been evaluated by DWR, data that indicate groundwater level trends over a period of time should be collected and evaluated.	WSA Section 3 DWR Bulletin 118 has not projected estimates of overdraft specific to the Palo Verde Mesa Groundwater Basin; however, possible overdraft conditions should be investigated based on current groundwater extraction rates and changes in recharge from decreasing agricultural use
	e) If the evaluation indicates an overdraft due to existing groundwater extraction, or projected increases in groundwater extraction, describe actions and/or program designed to eliminate the long term overdraft condition	WSA Section 3 The evaluation does not indicate an overdraft condition due to existing groundwater extraction. Groundwater extraction proposed by other future projects (Blythe Energy) may stress the aquifer capabilities and develop overdraft conditions.
	f) If water supplier wells are plotted on a map, or are available from a geographic information system, the amount of water extracted by the water supplier for the past five years can be obtained from the Department of Health Services, Office of Drinking Water and Environmental Management.	Groundwater would supply less than an acre foot per year through CSA #122 facilities.

Guidelines Section Number and Title (DWR, 2003*)	Guidelines Direction	Relevant WSA Section and Response
	g) Description and analysis of the amount and location of groundwater pumped by the water supplier for the past five years. Include information on proposed pumping locations and quantities. The description and analysis is to be based on information that is reasonably available, including, but not limited to, historic use records from DWR.	Groundwater would supply less than an acre foot per year through CSA #122 facilities.
	h) Analysis of the location, amount, and sufficiency of groundwater that is projected to be pumped by the water supplier.	WSA Section 3
	Step 3 (page 21). Documenting project demand (Project Demand Analysis).	WSA Section 4.1
	Step 4 (page 26). Documenting dry year(s) supply.	WSA Section 4.1, see "Groundwater Supply Availability Projections" and Tables 2 and 3.
	Step 5 (page 31). Documenting dry year(s) demand.	WSA Section 4, see "Groundwater Supply Availability Projections" and Tables 2 and 3.
Section 6 (page 33). Is the projected water supply sufficient or insufficient for the proposed project?		WSA Section 5 (Conclusions) The projected water supply is sufficient for the proposed Project through water used from the PVID.
Section 7 (page 35). If the projected supply is determined to be insufficient.	*Does the assessment conclude that supply is "sufficient"? If no, continue.*	WSA Section 5 The WSA concludes the water supply is sufficient.
Section 8 (page 38). Final SB 610 assessment actions by lead agencies.	*The lead agency shall review the WSA and must decide whether additional water supply information is needed for its consideration of the proposed project. The lead agency "shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses."*	

* DWR (California Department of Water Resources), 2003. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. [online]: http://www.water.ca.gov/pubs/use/sb_610_sb_221_guidebook/guidebook.pdf. Accessed April 7, 2011.

APPENDIX H
WASH FEATURE
SUMMARY OF FINDINGS

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May 28, 2013

RENEWABLE RESOURCES GROUP

Blythe Mesa CUP 03685 Wash Feature

Summary of Findings

PROJECT NUMBER:
123128

PROJECT CONTACT:
Michel Ybarrondo
EMAIL:
Michel.ybarrondo@powereng.com
PHONE:
208-288-6131

POWER ENGINEERS

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Study Description

The purpose of this study was to delineate the 100-year floodplain for the wash feature located within the property at the request of the county. The surface feature had been identified based on available topographic maps. Due to the feature's apparent slopes as indicated on the topographic maps, SunPower engineers had proposed to avoid placing tracker panels there.

Existing Site Description

Power Engineers visited the site and took photos at the location shown on Figure 1. This location was the topographic low along Mesa Drive in the vicinity of the map feature. The photos are shown in Figures 2-4 and are labeled with the facing direction.

Based on the site visit and review of aerial photos, the feature is a slight depression with no discernable channel as shown in Figure 2. Similarly, looking east from the photo location in Figures 3 and 4, there is no channel feature based on sediment, topography or vegetation noted.

Proposed Site Preparation

Since most of the site has nearly level to gently sloping topography, no mass grading would be required. Some of the parcels where facilities and arrays would be located would require light grubbing for leveling and trenching. Access roads would require minimal grading. After grubbing and light grading, construction of staging areas would occur. On-site pre-assembly of trackers would take place in the assembly area. **The construction of staging areas will not be in the location of the floodplain delineation.**

The PV system proposed for the site can operate on slopes up to nine percent in all directions. Fine grading would only be required for the development of site access.

Installation of the electrical collection system would require excavations to a depth of about three feet for underground electrical circuits and inverter. The O&M building foundations would also be excavated to a depth of about three feet. **The O&M building is not proposed to be located in the floodplain delineation area.**

Proposed Construction Activities

The Project would be constructed in the following phases, which would occur simultaneously on different portions of the site:

- Development of staging areas and assembly areas, and grading of site access roads.
- Construction of arrays including pile installation, assembly of trackers, mounting of PV panels, and trenching and installation of electrical equipment for arrays.
- Construction of electrical transmission facilities including the construction of three substations, the 230 kV gen-tie line, and two O&M buildings.

Staging Areas, Assembly Areas, and Access Roads

Construction staging and material lay-down would be distributed across the solar facility evenly to allow for efficient distribution of components to different parts of the Project. One staging and material lay-down area would typically be set up for every 100 acres of the Project site. These lay-down areas would be temporarily fenced and would cover approximately five acres each. Lay-down areas would be converted to solar arrays as work is completed in the general area. Within the solar field, 10-foot-wide access roads would also be constructed to allow access to and maintenance of the solar panels.

Array Assembly

Tracker assembly may include up to 25 small gas-powered generators to power welding machines to assemble trackers and construct tracker arrays. Support piles up would be driven into the ground to a depth of eight to twelve feet using a vibration technology to reduce noise impacts. Torque tubes, electrical wire trays, and panels would then be installed on the piles. Concrete foundations for the drive motors would be poured in place, and electrical equipment for the array would be set in place. A tracked backhoe would drive piles. No blasting or rock breaking is anticipated or proposed. Small truck-mounted cranes or grade-all forklifts would place trackers on support tiles. Tracker installation would include small all-terrain vehicles to transport materials and workers on access roads and array aisles.

Substations

Construction of the substations would involve site preparation, clearing of the switchrack sites, and installation of substructures and electrical equipment. Each site would first be cleared and graded, and then security-fenced for the duration of substation construction. Underground Service Alert would be contacted to mark the locations of existing buried utilities in the vicinity. Substation materials and equipment would be delivered to, and stored at, the substation site, as required, during construction. The sites would be graded to maintain current drainage patterns as much as possible.
Each substation would be constructed with conventional grading and construction equipment. Grading would establish the desired site grade, and minor excavation would provide concrete footings for the substation equipment. The substation sites would be graveled with crushed rock for grounding and employee safety purposes. **The project substations are not proposed to be located in the floodplain delineation area.**

O&M Buildings

The O&M building areas would be surveyed and staked. A concrete slab would be poured to the dimensions of each building. The prefabricated steel building structures would then be assembled. The exterior finish would be constructed as the mechanical and electrical systems are built inside. Interior finishing would follow, and final fixtures and equipment would be installed. **The O&M building is not proposed to be located in the floodplain delineation area.**

Gen-tie Line

The gen-tie line construction would involve the following activities: (1) construction of staging areas for trailers, office personnel, equipment, material staging, lay-down, and employee parking; (2) construction of access roads to the structure locations; (3) pole erection; (4) conductor installation; (5)

tension and pulling sites of conductors; and (6) installation of overhead ground/fiber optic communications systems. **Gen-tie lines are not proposed to be located in the floodplain delineation area.**

Design Flows

To determine the design flows for our models, we followed the methods outlined in the Riverside County Flood Control and Water Conservation District Hydrology Manual, 1978. Hydrologic calculations are shown in Appendix A. The calculated 100-year flow using the 3-hour 100-year storm is 3,220 cubic feet per second (cfs).

Topography

The survey used for the cross-sections was provided to POWER and has a resolution of 5-foot intervals.

Representation of Vegetation

In the model, the effects of vegetation on flow are represented by Manning's n values. These values were estimated by comparing the site conditions to photos of site conditions which were similar and have verified Manning's n values. Given the similar vegetation conditions within the washes and the large design flow, Manning's n through the cross-sections was kept constant at 0.03.

Scour Calculations

At the request of Riverside County Flood Control, we performed preliminary scour calculations using the HEC-RAS hydraulic model results. Hydraulic Engineering Center HEC-18 method was used and the equation is shown after Table 1 in Appendix C. Scour was calculated for the center of the channel, the left and right overbanks of the channel, and at points where arrays are shown in the calculated floodplain in Figure 1A. Due to the wide, flat nature of the area, water depths are shallow (2.85-ft maximum) and are generally less than or equal to 2 feet outside the proposed avoidance area. Stream velocities vary from 5.8 ft/s (4 mph) to an average of 2.4 ft/s (1.6 mph) outside of the main channel. Since minimal grading will be done as mentioned above in the Proposed Construction Activities section, it was assumed that no channelization or other variables that can increase scour depths will be present post-construction.

Results

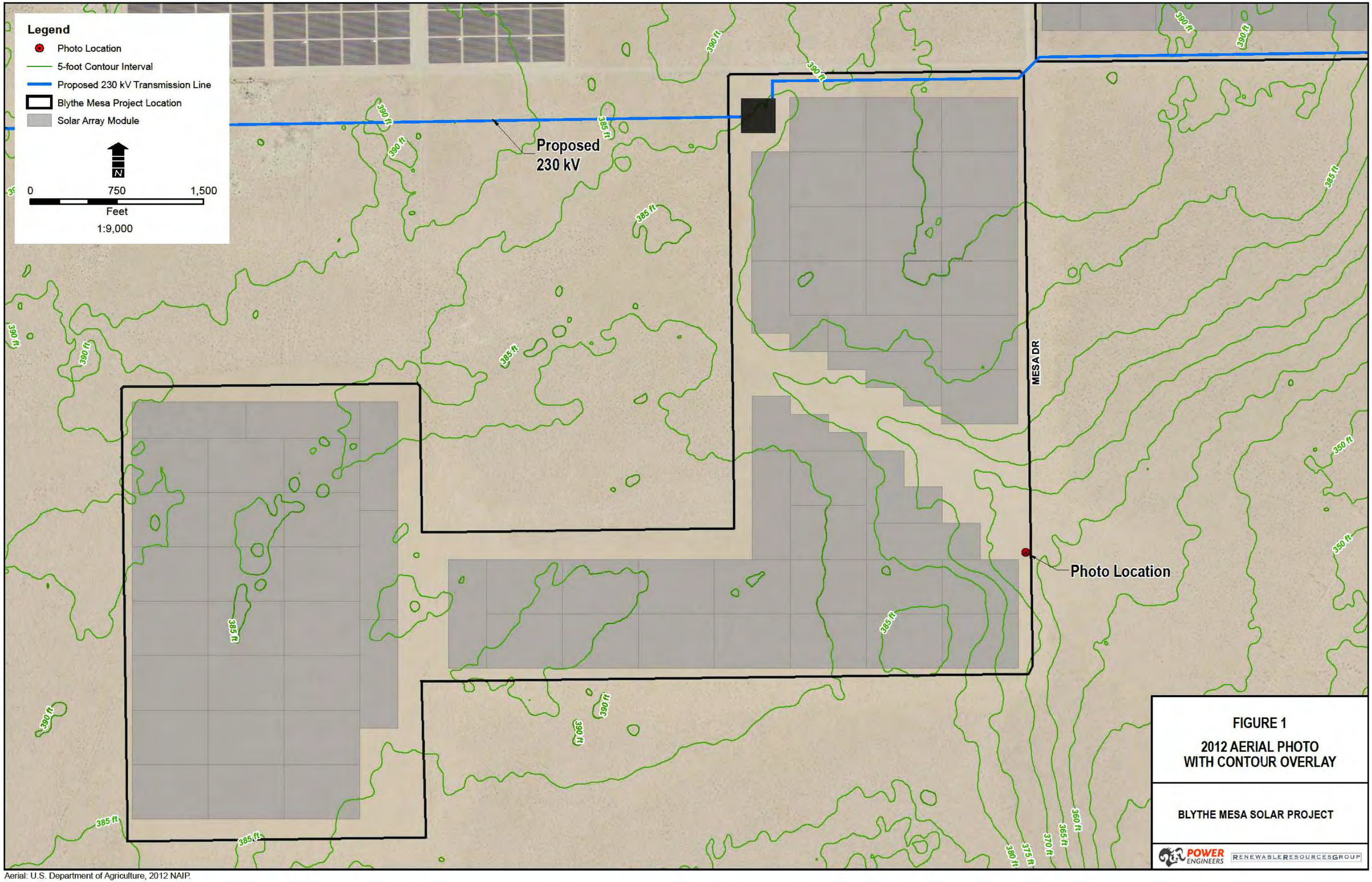
Floodplain Delineation

The extents of the 100-year floodplains for the area are shown on Figure 1A. The floodplain is based on the predicted flow elevation for each cross-section and interpolation between them. Cross-sections can be found in Appendix B. The majority of the floodplain falls within the avoided area proposed. However, the arrays do encroach on the calculated floodplain in a couple of locations. This is due

to the relatively flat topography perpendicular to the flow direction in the area. If it is deemed necessary during final design, the panels and associated hardware can be elevated to provide additional clearance above the calculated floodplain water elevation.

Scour Calculations

Preliminary scour depths are shown in Table 1 in Appendix C and are also summarized for points of interest on Figure 1A. The maximum scour in the deepest part of the channel with the highest velocity is 16 inches which is minimal for a lightly loaded pier driven to a depth of 8-12 feet. Preliminary scour depths for the points highlighted in Figure 1A range from 14-7 inches. During final design, if it is deemed necessary by the foundation design engineer, the pier design will account for scouring.



Aerial: U.S. Department of Agriculture, 2012 NAIP.

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Legend

- Photo Location
- Camera View and Direction
- Proposed 230 kV Transmission Line
- Blythe Mesa Project Location
- Solar Array Module

N

0 2,500 5,000

Feet

1:30,000

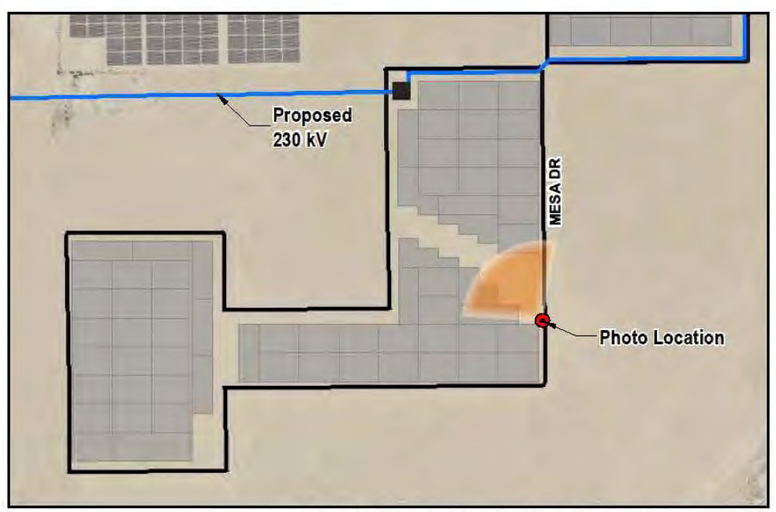


PHOTO LOCATION WITH CAMERA VIEW

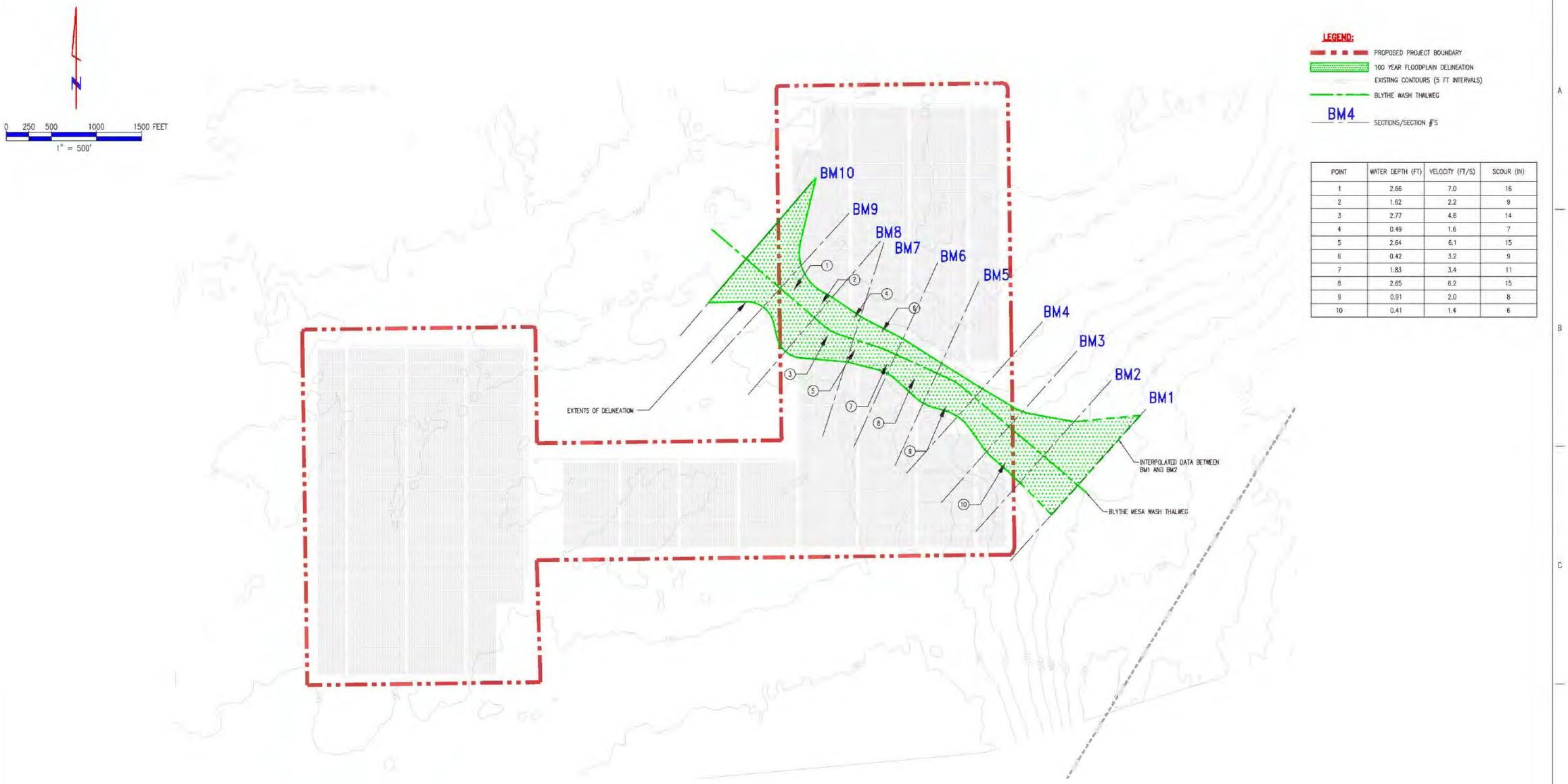
FIGURE 2

SITE PHOTO FACING NORTHWEST

BLYTHE MESA SOLAR PROJECT

POWER ENGINEERS RENEWABLERESOURCESGROUP

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POINT	WATER DEPTH (FT)	VELOCITY (FT/S)	SCOUR (IN)
1	2.66	7.0	16
2	1.62	2.2	9
3	2.77	4.6	14
4	0.49	1.6	7
5	2.64	6.1	15
6	0.42	3.2	9
7	1.83	3.4	11
8	2.65	6.2	15
9	0.91	2.0	8
10	0.41	1.4	6

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REV	REVISIONS	DATE	DRN	DSGN	CKD	APPD	REFERENCE DRAWINGS
D	ISSUED FOR REVIEW	06/17/13	PBK		MWY		
C	ISSUED FOR REVIEW	05/15/13	PBK		MWY		
B	ISSUED FOR REVIEW	02/13/13	PBK		MWY		
A	ISSUED FOR REVIEW	10/05/12	WBG			*	

DSGN
DRN WBG 10/05/12
CKD
SCALE: AS SHOWN

POWER ENGINEERS

RENEWABLE RESOURCES GROUP, INC.
BLYTHE MESA
BLYTHE, CALIFORNIA
FIGURE 1A: BM SOLAR PROJECT 100 YR FLOODPLAIN FOR CONDITIONAL USE PERMIT

JOB NUMBER 124493
REV D
DRAWING NUMBER 1 OF 1

123128_100YEAR-DEL.DWG

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Legend

- Photo Location
- Camera View and Direction
- Proposed 230 kV Transmission Line
- Blythe Mesa Project Location
- Solar Array Module

N

0 2,500 5,000

Feet

1:30,000

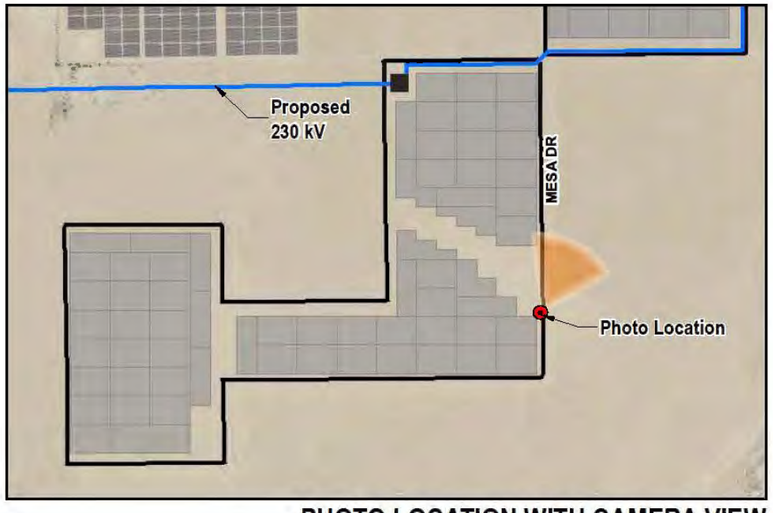


PHOTO LOCATION WITH CAMERA VIEW

FIGURE 3

SITE PHOTO
FACING NORTHEAST

BLYTHE MESA SOLAR PROJECT

POWER ENGINEERS RENEWABLERESOURCESGROUP

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SITE PHOTO, FACING SOUTHEAST

Legend

- Photo Location
- Camera View and Direction
- Proposed 230 kV Transmission Line
- Blythe Mesa Project Location
- Solar Array Module

N

0 2,500 5,000

Feet

1:30,000

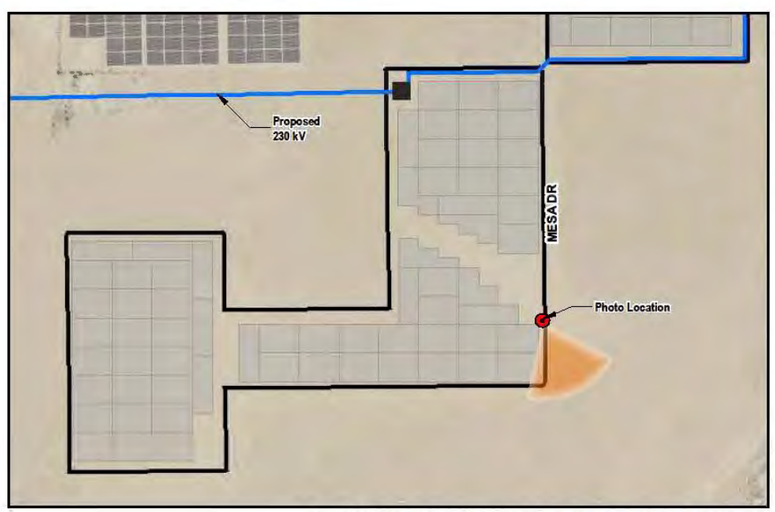


PHOTO LOCATION WITH CAMERA VIEW

FIGURE 4

SITE PHOTO FACING SOUTHEAST

BLYTHE MESA SOLAR PROJECT

POWER ENGINEERS RENEWABLE RESOURCES GROUP

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APPENDIX A

Hydrologic Calculations

The following pages are from the spreadsheet titled, "HydrologicAnalysis_BlytheMesa_3hr_050213.xlsx," which is also submitted electronically to facilitate review.

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Index

Project: Blythe Mesa
Project Number: 124493

Analyst: MWY
Latest Revision: 1/17/2013

Workbook Description

This workbook contains spreadsheets that:
- Calculate variables.
- Calculate synthetic unit hydrographs.
- Calculate adjusted point rainfall using NOAA data.
- Calculate Effective rainfall for HEC-HMS import.

Filename:

\\Boifs1\Civil\124493_123128\123128 Blythe Mesa I\Report_05-15-2013\Appendix A\[HydrologicAnalysis_BlytheMesa_3hr_050213.xlsx]Index

Sheet Titles:

Index
Streamstats
Variable Summary
S-Graph Values
NOAA Data
Adjusted Point Rainfall
Infiltration Rate
Unit Period Rainfall and Effective Rain
Flood Hydrograph Calculations
100-Year Flood Hydrograph, Blythe Mesa

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Streamstats

Project:	Blythe Mesa	**Analyst:**	MWY
Project Number:	124493	**Latest Revision:**	1/17/2013

StreamStats Information

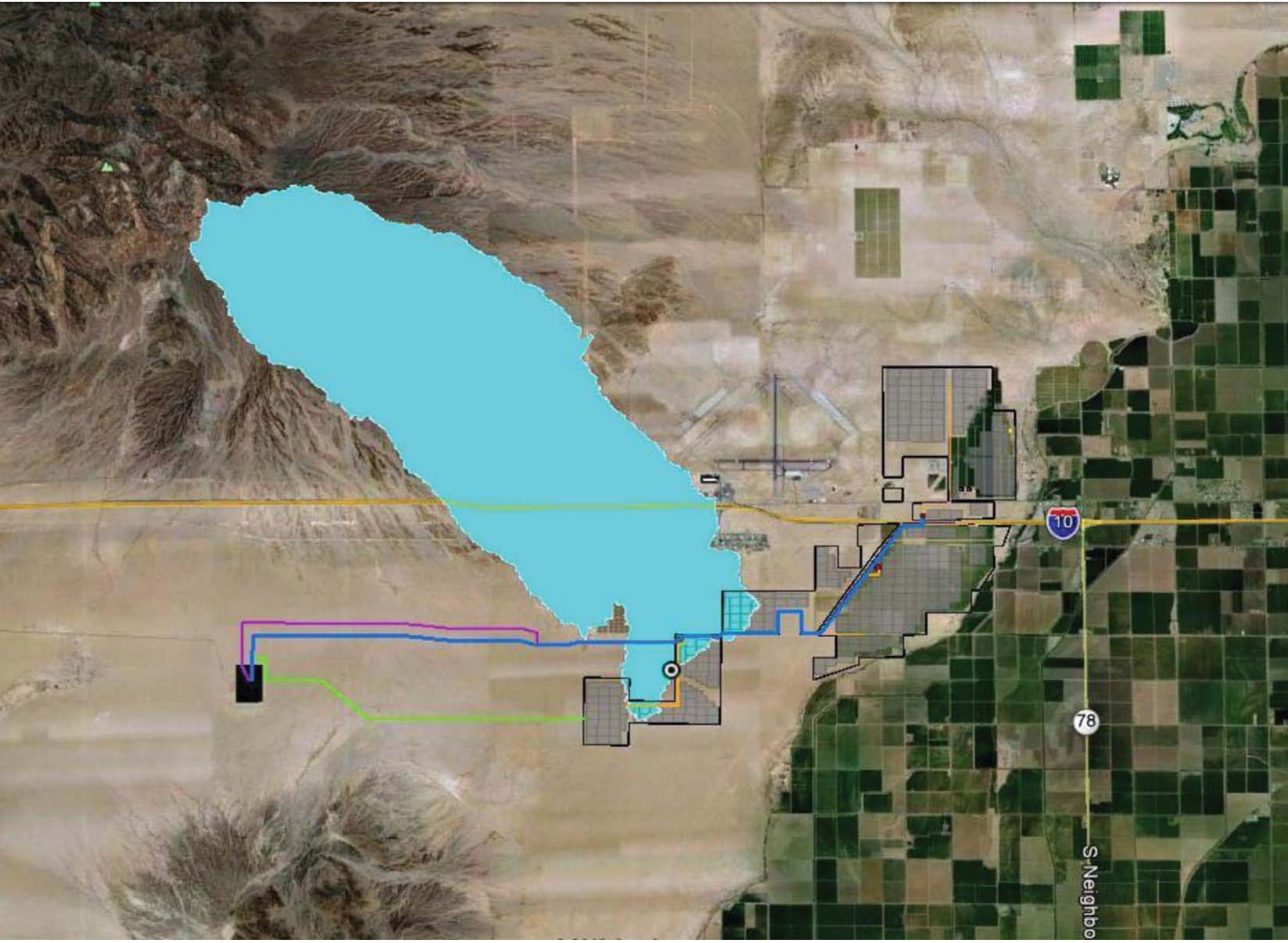
USGS
California StreamStats

Basin Characteristics Report

Date: Fri Jan 25 2013 10:13:34 Mountain Standard Time
NAD27 Latitude: 33.5829 (33 34 58)
NAD27 Longitude: -114.7356 (-114 44 08)
NAD83 Latitude: 33.5829 (33 34 59)
NAD83 Longitude: -114.7364 (-114 44 11)

Parameter	Value
Area, in square miles	14.6
Mean annual precipitation, in inches	4.21
Average maximum January temperature, in degrees Fahrenheit	66.5
Average minimum January temperature, in degrees Fahrenheit	41.7
Maximum elevation, in feet	1816
Minimum elevation, in feet	381
Relief, in feet	1435
Elevation at outlet, in feet	381
Average basin elevation, in feet	595
Relative relief - Basin relief divided by basin perimeter, in feet per mile	51.7
High Elevation Index - Percent of area above 6000 feet	0
Altitude Index, in thousands of feet. Estimated as 0.00083 times mean basin elevation.	0.49
Mean basin slope computed from 30 m DEM, in percent	11
Percentage of basin covered by forest	0
Percent of area covered by lakes and ponds	0
Percentage of impervious area determined from NLCD 2001 imperviousness dataset	1.4
X coordinate of the centroid, in map coordinates	-1718837.4
Y coordinate of the centroid, in map coordinates	1343212.0
Latitude of the outlet, NAD83	33.58292
X coordinate of the outlet, in map coordinates	-1716030.0
Y coordinate of the outlet, in map coordinates	1338090.0
Basin perimeter, in miles	27.8
Distance in miles from basin centroid to the coast	150
Length of the longest flow path in meters	15750
Elevation relief in meters	437

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Variable Summary

Project: Blythe Mesa **Analyst:** MWY

Project Number: 124493 **Latest Revision:** 1/17/2013

Spreadsheet Description:

- This spreadsheet summarizes input variables, lag calculations, and time period calculations.

Variables

Variable	Definition	Value	Source
A	Drainage Area (square miles)	14.6	StreamStats
K	Ultimate Discharge (CFS-hours/inch) =645*A	9417	
L	Length of longest Watercourse (miles)	9.8	StreamStats
Lca	Length along the longest watercourse, measured upstream to a point opposite the centroid of the area (miles)	4.9	StreamStats
H	Difference in elevation between the concentration point and the most remote point of the basin (feet)	1435	StreamStats
S	Overall slope of longest watercourse between headwaters and concentration point (feet per mile, S=H/L)	146.6	

Lag Calculation

Variable	Definition	Value	Source
Lag (hours)	24n(L x Lca/S^1/2)^0.38	1.2	
n	The visually estimated mean of the n (Mannings formula) values of all collection streams and channels within the watershed.	0.03	City of Riverside.

Unit Time Period Calculation

Variable	Definition	Value
25% of Lag Time	Ideal unit time period, unless the precipitation data is more detailed (minutes)	18.2
40% of Lag Time	Maximum time period (minutes)	29.1
Unit Time Period	25-40% of total Lag time (minutes)	15
Unit Time Period (% Lag)	This value is used in determination of the synthetic unit hydrograph	20.6

S-Graph Values

Project: Blythe Mesa
Project Number: 124493

Analyst: MWY
Latest Revision: 1/17/2013

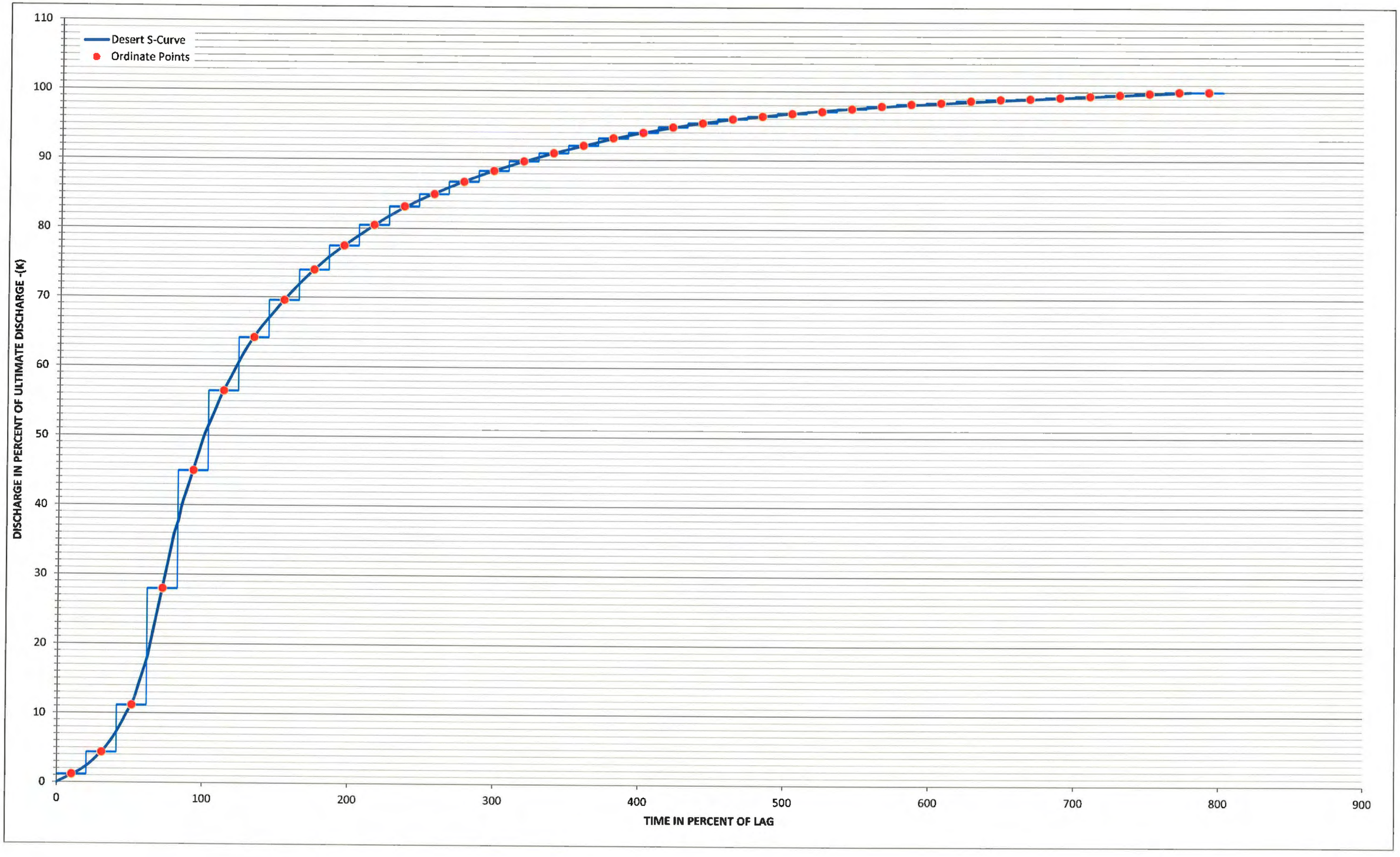
Spreadsheet Description:

- This spreadsheet is used to develop the S-graph values for use in HEC-HMS.
- Unit Time is calculated in the Variable Summary worksheet.
- For this project, the Desert S-Curve provided by Riverside County is used for calculations.
- The ordinate Midpoint is calculated as the midpoint between Unit Time Period adjusted for Time Percent of Lag.
- Discharge is adjusted to fit the S-Curve.

S-Graph Value Calculations

Unit Time (%)	20.6	
Ultimate Discharge (CFS-hours/Inches)	9417.0	From Variable Summary Worksheet

[15]	[16]		[17]	[18]	[19]
Unit Time Period	Time percent of Lag (%)	Ordinate Midpoint (%)	Cumulative Average Percent of Ultimate Discharge (S-Graph) (%)	Distributed Graph Percent [17]m-[17]m-1	Unit Hydrograph (CFS-hours/Inches) ([4]*[18])/100
1	20.6	10.3	1.2	1.2	113.004
2	41.2	30.9	4.4	3.2	301.344
3	61.8	51.5	11.2	6.8	640.356
4	82.4	72.1	28	16.8	1582.056
5	103.0	92.7	45	17.0	1600.89
6	123.6	113.3	56.5	11.5	1082.955
7	144.1	133.8	64.2	7.7	725.109
8	164.7	154.4	69.6	5.4	508.518
9	185.3	175.0	74	4.4	414.348
10	205.9	195.6	77.5	3.5	329.595
11	226.5	216.2	80.5	3.0	282.51
12	247.1	236.8	83.2	2.7	254.259
13	267.7	257.4	85	1.8	169.506
14	288.3	278.0	86.8	1.8	169.506
15	308.9	298.6	88.4	1.6	150.672
16	329.5	319.2	89.8	1.4	131.838
17	350.1	339.8	91	1.2	113.004
18	370.7	360.4	92.1	1.1	103.587
19	391.2	381.0	93.2	1.1	103.587
20	411.8	401.5	94	0.8	75.336
21	432.4	422.1	94.8	0.8	75.336
22	453.0	442.7	95.4	0.6	56.502
23	473.6	463.3	96	0.6	56.502
24	494.2	483.9	96.4	0.4	37.668
25	514.8	504.5	96.8	0.4	37.668
26	535.4	525.1	97.1	0.3	28.251
27	556.0	545.7	97.5	0.4	37.668
28	576.6	566.3	97.9	0.4	37.668
29	597.2	586.9	98.2	0.3	28.251
30	617.8	607.5	98.4	0.2	18.834
31	638.4	628.1	98.7	0.3	28.251
32	658.9	648.7	98.9	0.2	18.834
33	679.5	669.2	99	0.1	9.417
34	700.1	689.8	99.2	0.2	18.834
35	720.7	710.4	99.4	0.2	18.834
36	741.3	731.0	99.6	0.2	18.834
37	761.9	751.6	99.8	0.2	18.834
38	782.5	772.2	100	0.2	18.834
39	803.1	792.8	100	0.0	0
				100.0	9417


Desert S-Curve
Ordinate Points
DISCHARGE IN PERCENT OF ULTIMATE DISCHARGE -(K)
TIME IN PERCENT OF LAG
110
100
90
80
70
60
50
40
30
20
10
0
0
100
200
300
400
500
600
700
800
900

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NOAA Data

Project: Blythe Mesa **Analyst:** MWY

Project Number: 124493 **Latest Revision:** 1/17/2013

Spreadsheet Description:

- The data shown in the pasted pdf below provides point precipitation frequency estimates.
- These values are used to determine the adjusted point rainfall.

NOAA Atlas 14 Information

Double click on the window below to open the pdf document.

Value used: 24-hr duration with an average recurrence interval of 100 years--3.87 inches.

Notes: Numerous locations within the basin were compared. Variation between the different points was minimal. This location in the mid upper portion of the basin is not the highest, but is above the majority of the basin.



NOAA Atlas 14, Volume 6, Version 2
Location name: Blythe, California, US*
Coordinates: 33.6213, -114.7739
Elevation: 691ft*
*source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence interval

Duration	Average recurrence interval(years)								
	1	2	5	10	25	50	100	200	
5-min	0.090 (0.075–0.108)	0.148 (0.124–0.179)	0.222 (0.185–0.269)	0.281 (0.232–0.343)	0.358 (0.286–0.452)	0.415 (0.325–0.536)	0.472 (0.360–0.626)	0.530 (0.393–0.722)	(
10-min	0.128 (0.106–0.155)	0.212 (0.178–0.256)	0.318 (0.265–0.385)	0.402 (0.333–0.491)	0.513 (0.410–0.648)	0.595 (0.466–0.769)	0.677 (0.517–0.897)	0.760 (0.563–1.04)	(
15-min	0.155 (0.130–0.187)	0.256 (0.215–0.310)	0.385 (0.321–0.466)	0.486 (0.402–0.594)	0.620 (0.496–0.784)	0.720 (0.563–0.930)	0.819 (0.625–1.09)	0.919 (0.681–1.25)	(
30-min	0.214 (0.179–0.258)	0.353 (0.296–0.426)	0.530 (0.442–0.641)	0.670 (0.554–0.818)	0.854 (0.683–1.08)	0.992 (0.776–1.28)	1.13 (0.860–1.49)	1.27 (0.937–1.73)	(
60-min	0.299 (0.250–0.360)	0.493 (0.413–0.595)	0.740 (0.617–0.895)	0.935 (0.774–1.14)	1.19 (0.953–1.51)	1.38 (1.08–1.79)	1.58 (1.20–2.09)	1.77 (1.31–2.41)	(
2-hr	0.414 (0.347–0.499)	0.644 (0.539–0.776)	0.938 (0.783–1.14)	1.17 (0.978–1.43)	1.48 (1.19–1.87)	1.72 (1.34–2.22)	1.95 (1.49–2.58)	2.19 (1.62–2.98)	(
3-hr	0.481 (0.403–0.579)	0.731 (0.612–0.882)	1.05 (0.878–1.27)	1.31 (1.08–1.60)	1.65 (1.32–2.09)	1.91 (1.50–2.47)	2.17 (1.66–2.87)	2.43 (1.80–3.32)	(
6-hr	0.577 (0.484–0.696)	0.859 (0.719–1.04)	1.22 (1.02–1.48)	1.52 (1.26–1.86)	1.92 (1.54–2.43)	2.23 (1.74–2.87)	2.53 (1.93–3.36)	2.85 (2.11–3.89)	(
12-hr	0.648 (0.543–0.781)	0.961 (0.805–1.16)	1.38 (1.15–1.67)	1.72 (1.42–2.10)	2.19 (1.75–2.77)	2.56 (2.00–3.31)	2.94 (2.24–3.89)	3.33 (2.47–4.54)	(
24-hr	0.814 (0.719–0.941)	1.21 (1.07–1.40)	1.75 (1.54–2.03)	2.21 (1.93–2.58)	2.84 (2.41–3.42)	3.34 (2.78–4.10)	3.87 (3.15–4.85)	4.43 (3.51–5.69)	(
2-day	0.889 (0.785–1.03)	1.33 (1.17–1.54)	1.92 (1.69–2.23)	2.42 (2.12–2.83)	3.13 (2.66–3.77)	3.70 (3.08–4.54)	4.30 (3.50–5.39)	4.93 (3.92–6.34)	(
3-day	0.935 (0.825–1.08)	1.40 (1.23–1.62)	2.03 (1.78–2.35)	2.56 (2.23–2.99)	3.31 (2.81–3.98)	3.91 (3.25–4.80)	4.54 (3.70–5.69)	5.22 (4.14–6.70)	(
4-day	0.991 (0.875–1.15)	1.48 (1.31–1.72)	2.15 (1.89–2.50)	2.72 (2.37–3.17)	3.51 (2.98–4.23)	4.15 (3.45–5.09)	4.82 (3.92–6.04)	5.53 (4.39–7.10)	(
7-day	1.03 (0.906–1.19)	1.55 (1.36–1.79)	2.25 (1.98–2.61)	2.83 (2.47–3.31)	3.65 (3.09–4.39)	4.30 (3.57–5.27)	4.97 (4.05–6.23)	5.68 (4.51–7.30)	(
10-day	1.06 (0.938–1.23)	1.60 (1.41–1.85)	2.32 (2.04–2.69)	2.92 (2.55–3.41)	3.75 (3.18–4.51)	4.41 (3.67–5.40)	5.09 (4.14–6.38)	5.81 (4.61–7.47)	(
20-day	1.18 (1.04–1.36)	1.74 (1.53–2.01)	2.49 (2.19–2.89)	3.12 (2.72–3.64)	3.99 (3.39–4.81)	4.69 (3.90–5.75)	5.41 (4.40–6.78)	6.17 (4.90–7.93)	(
30-day	1.29 (1.14–1.49)	1.88 (1.65–2.17)	2.66 (2.34–3.09)	3.32 (2.90–3.88)	4.24 (3.60–5.11)	4.98 (4.14–6.10)	5.75 (4.68–7.20)	6.57 (5.21–8.44)	(
45-day	1.45 (1.28–1.68)	2.07 (1.83–2.40)	2.91 (2.56–3.37)	3.61 (3.15–4.22)	4.61 (3.91–5.55)	5.41 (4.50–6.63)	6.25 (5.09–7.84)	7.17 (5.69–9.21)	(
60-day	1.61	2.26	3.13	3.88	4.95	5.81	6.73	7.74	

Adjusted Point Rainfall

Project: Blythe Mesa
Project Number: 124493

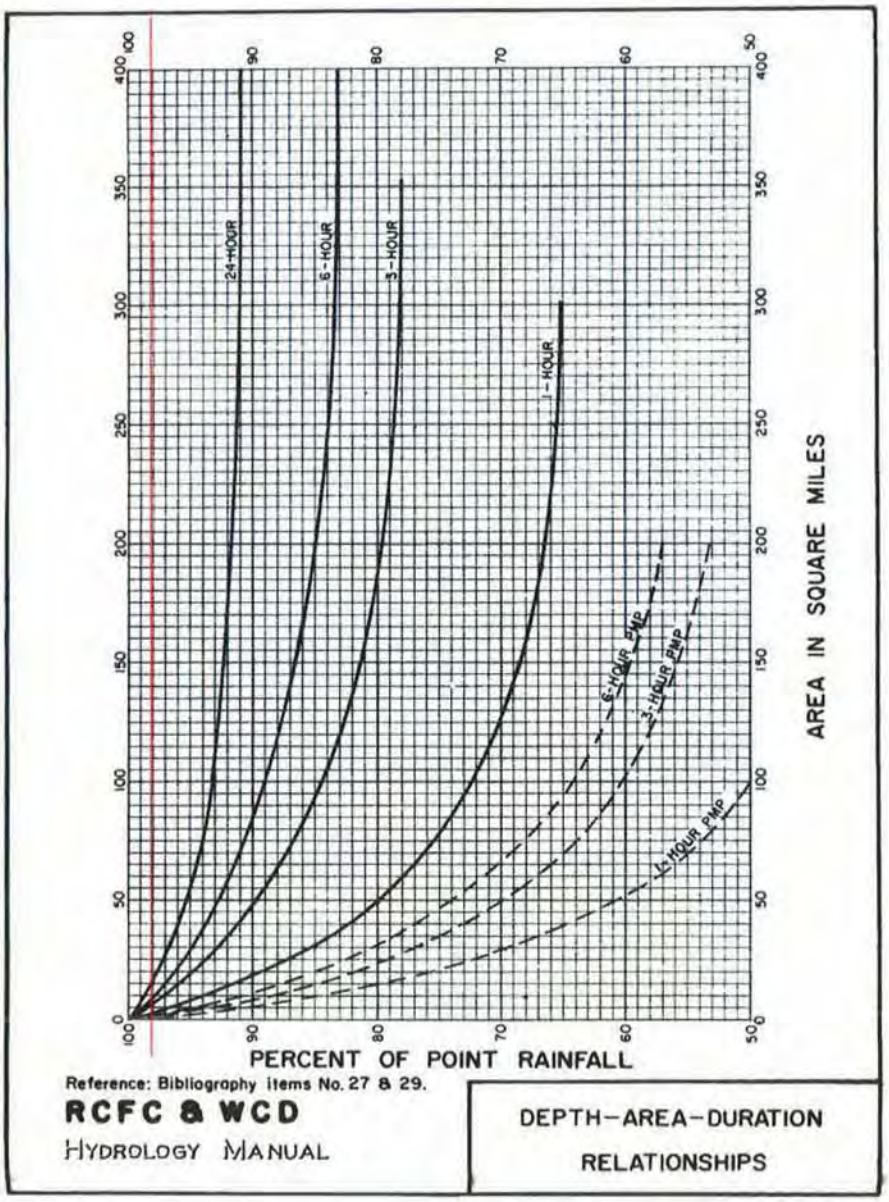
Analyst: MWY
Latest Revision: 1/17/2013

Spreadsheet Description:

- This spreadsheet determines the adjusted point rainfall.
- The red line over the plate can be selected and moved to determine the percentage of point rainfall.

Adjusted Point Rainfall

Point Rainfall 100-year, 24-hour storm (in)	3.87	From NOAA Atlas 14 Data in NOAA Data worksheet.
Percentage of Point Rainfall (%)	98	From Riverside Hydrology Manual, Plate E-5.8 below using a watershed area of 14.6 mi.
Adjusted Point Rainfall (in)	3.8	



Reference: Bibliography Items No. 27 & 29.

RCFC & WCD
HYDROLOGY MANUAL

DEPTH-AREA-DURATION RELATIONSHIPS

PLATE E-5.8

Infiltration Rate

Project: Blythe Mesa
Project Number: 124493

Analyst: MWY
Latest Revision: 1/17/2013

Spreadsheet Description:

- This spreadsheet determines the infiltration rate.
- The red line over the plate can be selected and moved to determine infiltration rate.

Infiltration Rate

Runoff Index Number (RI)	80	Assumed and recommended by Riverside County.
AMC	II	
Infiltration Rate (in/hr)	0.248	

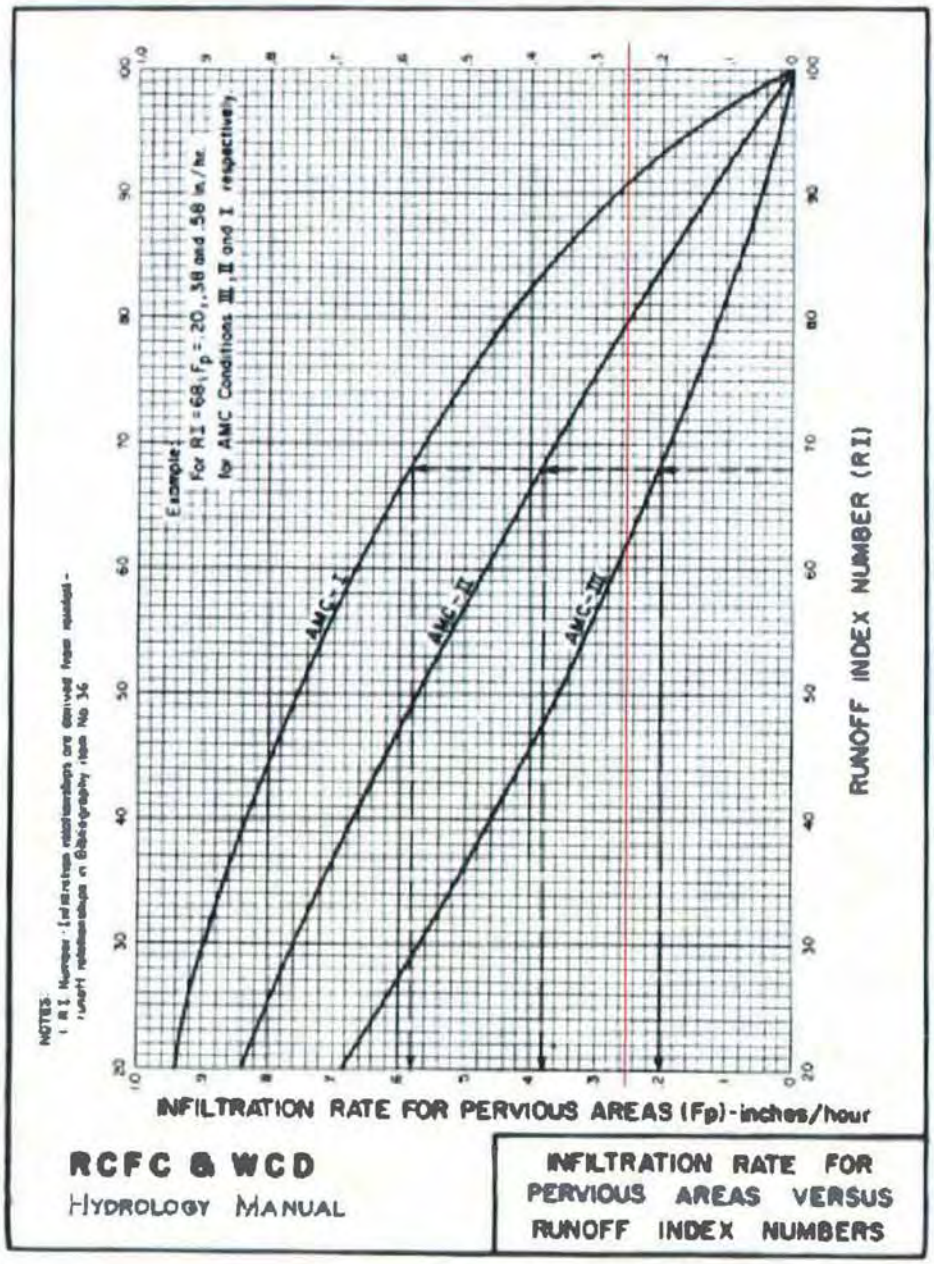


PLATE E-6.2

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Unit Period Rainfall and Effective Rain

Project: Blythe Mesa
Project Number: 124493

Analyst: MWY
Latest Revision: 1/17/2013

Spreadsheet Description:

- This spreadsheet is used to calculate the unit period rainfall and ultimately, the Effective Rain for import into HEC-HMS or for use in the calculation of the Flood Hydrograph.

Unit Period Rainfall

Adjusted Point Rainfall (inches)		**3.8**	Calculated on Adjusted Point Rainfall worksheet
Unit time (full), (min)		**15.0**	Calculated on Variable Summary worksheet

RI	Barren, Rockland, eroded and graded land	80	Assumed due to lack of soil information and confirmed with Riverside County.
Fp	Loss rate for pervious areas using the RI and Plate E-6.2 assuming AMC-II (in/hr)	0.248	Calculated on Infiltration Rate worksheet
Ai	Impervious area	0	Assumed based on lack of development. There is the highway and a small amount of development, but it is minimal.
Ft	Variable maximum loss rate for each time period (in/hr)	Variable. Calculated in the "Max Loss Rate (in/hr)" column in the table below.	
Fm	Minimum Value on loss rate curve, typically 50 to 75% of F (in/hr)	0.124	Assumed 50% of Fp
F	Adjusted loss rate (in/hr)	0.248	Adjusted for impervious area.
C	Defined as (F-Fm)/54	0.00230	
T	Time from beginning of storm.	The value shown here is the actual unit time period which is used for the calculation. The value used in the calculation is from the start of the storm to the middle of each unit time period, i.e., for a unit time of 30-minutes the maximum loss rate would be computed for T=15-minutes for period one, T=45-minutes for period two, etc.	

[15]	[20]	[21]	[22A]	[22B]	[23]
Unit of Time Period	**Pattern Percentages**	**Rainfall Rates (in/hr)**	**Max Loss Rate (in/hr)**	**Low Loss Rate (in/hr)**	**Effective Rain (in/hr)**
	Unit hydrograph values from "HMS S-Graphs" workbook received from Riverside County	**`=((Pattern Percentages*100)*Adjusted Point Rainfall*60)/(100*Unit Time)**	**`=C*(24-(Unit time Period*Unit time-Unit time/2)/60)^1.55+Fm**	**`=90% of Rainfall Rates**	**`=Rainfall rates- max loss rate unless answer is negative, then - min loss rates**
1	0.50%	0.076	0.438	0.068	**0.01**
2	0.70%	0.106	0.435	0.096	**0.01**
3	0.60%	0.091	0.433	0.082	**0.01**
4	0.70%	0.106	0.430	0.096	**0.01**
5	0.80%	0.121	0.428	0.109	**0.01**
6	1.00%	0.152	0.425	0.137	**0.02**
7	1.00%	0.152	0.423	0.137	**0.02**
8	1.10%	0.167	0.420	0.150	**0.02**
9	1.30%	0.197	0.418	0.177	**0.02**
10	1.50%	0.228	0.415	0.205	**0.02**
11	1.30%	0.197	0.413	0.177	**0.02**
12	1.60%	0.243	0.410	0.218	**0.02**
13	1.80%	0.273	0.408	0.246	**0.03**
14	2.00%	0.303	0.405	0.273	**0.03**
15	2.10%	0.319	0.403	0.287	**0.03**
16	2.50%	0.379	0.401	0.341	**0.04**
17	3.00%	0.455	0.398	0.410	**0.06**
18	3.30%	0.501	0.396	0.451	**0.10**
19	3.90%	0.592	0.393	0.532	**0.20**
20	4.30%	0.652	0.391	0.587	**0.26**
21	3.00%	0.455	0.388	0.410	**0.07**
22	4.00%	0.607	0.386	0.546	**0.22**
23	3.80%	0.576	0.384	0.519	**0.19**
24	3.50%	0.531	0.381	0.478	**0.15**
25	5.10%	0.774	0.379	0.696	**0.39**
26	5.70%	0.865	0.377	0.778	**0.49**
27	6.80%	1.032	0.374	0.928	**0.66**
28	4.60%	0.698	0.372	0.628	**0.33**
29	5.30%	0.804	0.370	0.724	**0.43**
30	5.10%	0.774	0.367	0.696	**0.41**
31	4.70%	0.713	0.365	0.642	**0.35**
32	3.80%	0.576	0.363	0.519	**0.21**
33	0.80%	0.121	0.360	0.109	**0.01**
34	0.60%	0.091	0.358	0.082	**0.01**
35	1.00%	0.152	0.356	0.137	**0.02**
36	0.90%	0.137	0.353	0.123	**0.01**
37	0.80%	0.121	0.351	0.109	**0.01**
38	0.50%	0.076	0.349	0.068	**0.01**
39	0.70%	0.106	0.347	0.096	**0.01**
40	0.50%	0.076	0.344	0.068	**0.01**
41	0.60%	0.091	0.342	0.082	**0.01**
42	0.50%	0.076	0.340	0.068	**0.01**
43	0.50%	0.076	0.338	0.068	**0.01**
44	0.50%	0.076	0.335	0.068	**0.01**
45	0.50%	0.076	0.333	0.068	**0.01**
46	0.40%	0.061	0.331	0.055	**0.01**
47	0.40%	0.061	0.329	0.055	**0.01**
48	0.40%	0.061	0.327	0.055	**0.01**
Totals-->>	**100.00%**				**5.0**

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Flood Hydrograph Calculations

Project: Blythe Mesa **Analyst:** MWY
Project Number: 124493 **Latest Revision:** 1/17/2013

Spreadsheet Description:

- This spreadsheet is used to calculate the Flood Hydrograph.
- Unit Time Period is calculated in the Variable Summary Worksheet.
- Effective Rain is calculated in the Unit Period Rainfall Worksheet.
- This is a digital reproduction of Plate E-2.3 from the Riverside Hydrology Manual.
- Peak flow is estimated using cells AY and AZ 105. This value and the calculated curve below is displayed graphically on the Flood Hydrograph Worksheet.

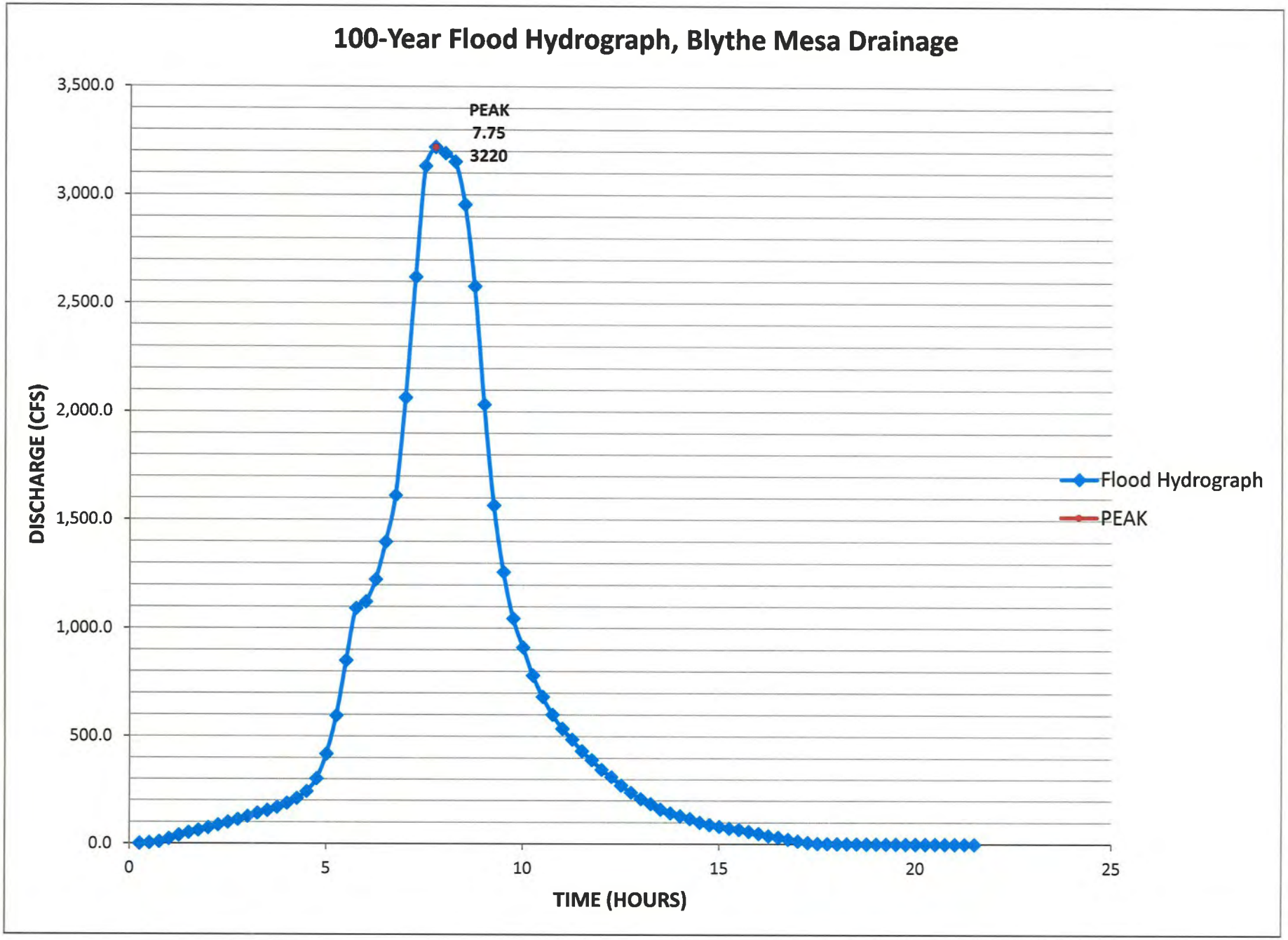
Flood Hydrograph Calculations

Unit Time Period (minutes)	15.0

Unit Graph (imported from S-Graph Values Worksheet)	Unit Period (below and across)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	Flood Hydro-graph (cfs)	Time (hour)
Effective Rain (imported from Unit Period Rainfall Worksheet -->		0.0076	0.0106	0.0091	0.0106	0.0121	0.0152	0.0152	0.0167	0.0197	0.0228	0.0197	0.0243	0.0273	0.0303	0.0319	0.0379	0.0570	0.1049	0.1984	0.2615	0.0666	0.2207	0.1928	0.1496	0.3947	0.4881	0.6574	0.3260	0.4345	0.4065	0.3481	0.2139	0.0121	0.0091	0.0152	0.0137	0.0121	0.0076	0.0106	0.0076	0.0091	0.0076	0.0076	0.0076	0.0076	0.0061	0.0061	0.0061		
113.004	1	0.9																																																[illegible]	0.25
301.344	2	2.3	1.2																																															3.5	0.5
640.356	3	4.9	3.2	1.0																																														[illegible]	0.75
1582.056	4	12.0	6.8	2.7	1.2																																													[illegible]	1
1600.89	5	12.1	16.8	5.8	3.2	1.4																																												39.3	1.25
1082.955	6	8.2	17.0	14.4	6.8	3.7	1.7																																											51.8	1.5
725.109	7	5.5	11.5	14.6	16.8	7.8	4.6	1.7																																										62.4	1.75
508.518	8	3.9	7.7	9.9	17.0	19.2	9.7	4.6	1.9																																									73.8	2
414.348	9	3.1	5.4	6.6	11.5	19.4	24.0	9.7	5.0	2.2																																								87.0	2.25
329.595	10	2.5	4.4	4.6	7.7	13.1	24.3	24.0	10.7	5.9	2.6																																							99.9	2.5
282.51	11	2.1	3.5	3.8	5.4	8.8	16.4	24.3	26.4	12.6	6.9	2.2																																						112.4	2.75
254.259	12	1.9	3.0	3.0	4.4	6.2	11.0	16.4	26.7	31.2	14.6	5.9	2.7																																					127.1	3
169.506	13	1.3	2.7	2.6	3.5	5.0	7.7	11.0	18.1	31.6	36.0	12.6	7.3	3.1																																				142.5	3.25
169.506	14	1.3	1.8	2.3	3.0	4.0	6.3	7.7	12.1	21.4	36.4	31.2	15.5	8.2	3.4																																			154.7	3.5
150.672	15	1.1	1.8	1.5	2.7	3.4	5.0	6.3	8.5	14.3	24.6	31.6	38.4	17.5	9.1	3.6																																		169.5	3.75
131.838	16	1.0	1.6	1.5	1.8	3.1	4.3	5.0	6.9	10.0	16.5	21.4	38.9	43.2	19.4	9.6	4.3																																	188.5	4
113.004	17	0.9	1.4	1.4	1.8	2.1	3.9	4.3	5.5	8.2	11.6	14.3	26.3	43.7	48.0	20.4	11.4	6.4																																211.4	4.25
103.587	18	0.8	1.2	1.2	1.6	2.1	2.6	3.9	4.7	6.5	9.4	10.0	17.6	29.6	48.6	50.4	24.3	17.2	11.9																															243.4	4.5
103.587	19	0.6	1.1	1.0	1.4	1.8	2.6	2.6	4.2	5.6	7.5	8.2	12.3	19.8	32.9	51.0	60.0	36.5	31.6	22.4																														303.3	4.75
75.336	20	0.6	1.1	0.9	1.2	1.6	2.3	2.6	2.8	5.0	6.4	6.5	10.1	13.9	22.0	34.5	60.7	90.2	67.2	59.8	29.5																													418.9	5
75.336	21	0.6	0.8	0.9	1.1	1.4	2.0	2.3	2.8	3.3	5.8	5.6	8.0	11.3	15.4	23.1	41.1	91.2	166.0	127.0	78.8	7.5																												596.1	5.25
56.502	22	0.4	0.8	0.7	1.1	1.3	1.7	2.0	2.5	3.3	3.9	5.0	6.9	9.0	12.6	16.2	27.5	61.7	168.0	313.8	167.4	20.1	24.9																											850.8	5.5
56.502	23	0.4	0.6	0.7	0.8	1.3	1.6	1.7	2.2	3.0	3.9	3.3	6.2	7.7	10.0	13.2	19.3	41.3	113.6	317.6	413.6	42.7	66.5	21.8																										1092.9	5.75
37.668	24	0.3	0.6	0.5	0.8	0.9	1.6	1.6	1.9	2.6	3.4	3.3	4.1	6.9	8.6	10.5	15.7	29.0	76.1	214.8	418.6	105.4	141.3	58.1	16.9																									1123.6	6
37.668	25	0.3	0.4	0.5	0.6	0.9	1.1	1.6	1.7	2.2	3.0	3.0	4.1	4.6	7.7	9.0	12.5	23.6	53.4	143.8	283.1	106.7	349.2	123.4	45.1	44.6																								1226.3	6.25
28.251	26	0.2	0.4	0.3	0.6	0.7	1.1	1.1	1.7	2.0	2.6	2.6	3.7	4.6	5.1	8.1	10.7	18.8	43.5	100.9	189.6	72.2	353.4	305.0	95.8	119.0	55.2																							1398.9	6.5
37.668	27	0.3	0.3	0.3	0.4	0.7	0.9	1.1	1.3	2.0	2.4	2.2	3.2	4.1	5.1	5.4	9.6	16.1	34.6	82.2	133.0	48.3	239.0	308.6	236.8	252.8	147.1	74.3																						1612.1	6.75
37.668	28	0.3	0.4	0.3	0.4	0.5	0.9	0.9	1.3	1.5	2.4	2.0	2.7	3.6	4.6	5.4	6.4	14.5	29.6	65.4	108.3	33.9	160.1	208.8	239.6	624.5	312.6	198.1	36.8																					2065.5	7
28.251	29	0.2	0.4	0.3	0.3	0.5	0.6	0.9	0.9	1.5	1.7	2.0	2.5	3.1	4.0	4.8	6.4	9.7	26.7	56.0	86.2	27.6	112.2	139.8	162.1	631.9	772.2	420.9	98.2	49.1																				2622.9	7.25
18.834	30	0.1	0.3	0.3	0.4	0.3	0.6	0.6	0.9	1.1	1.7	1.5	2.5	2.8	3.4	4.2	5.7	9.7	17.8	50.4	73.9	22.0	91.5	98.0	108.5	427.5	781.4	1040.0	208.7	130.9	45.9																			[illegible]	7.5
28.251	31	0.2	0.2	0.3	0.4	0.5	0.4	0.6	0.6	1.1	1.3	1.5	1.8	2.8	3.1	3.6	5.0	8.6	17.8	33.6	66.5	18.8	72.8	79.9	76.1	286.2	528.6	1052.4	515.7	278.2	122.5	39.3																		[illegible]	7.75
18.834	32	0.1	0.3	0.2	0.3	0.5	0.6	0.4	0.6	0.7	1.3	1.1	1.8	2.1	3.1	3.3	4.3	7.5	15.8	33.6	44.3	16.9	62.4	63.5	62.0	200.7	353.9	711.9	521.8	687.4	260.3	104.9	24.2																	[illegible]	8
9.417	33	0.1	0.2	0.3	0.2	0.3	0.6	0.6	0.5	0.7	0.9	1.1	1.4	2.1	2.3	3.3	3.9	6.4	13.8	29.9	44.3	11.3	56.1	54.5	49.3	163.6	248.2	476.7	353.0	695.6	643.1	222.9	64.5	1.4																3151.8	8.25
18.834	34	0.1	0.1	0.2	0.3	0.2	0.4	0.6	0.6	0.6	0.9	0.7	1.4	1.5	2.3	2.4	3.9	5.9	11.9	26.2	39.4	11.3	37.4	49.0	42.3	130.1	202.3	334.3	236.4	470.5	650.7	550.7	137.0	3.7	1.0															[illegible]	8.5
18.834	35	0.1	0.2	0.1	0.2	0.3	0.3	0.4	0.6	0.7	0.6	0.7	0.9	1.5	1.7	2.4	2.9	5.9	10.9	22.4	34.6	10.0	37.4	32.7	38.0	111.5	160.9	272.4	165.8	315.1	440.2	557.3	338.4	7.8	2.7	1.7														2579.4	8.75
18.834	36	0.1	0.2	0.2	0.1	0.2	0.4	0.3	0.5	0.7	0.9	0.6	0.9	1.0	1.7	1.8	2.9	4.3	10.9	20.5	29.5	8.8	33.3	32.7	25.4	100.4	137.9	216.7	135.1	220.9	294.7	377.0	342.4	19.2	5.8	4.6	1.5													2034.1	9
18.834	37	0.1	0.2	0.2	0.2	0.1	0.3	0.4	0.3	0.6	0.9	0.7	0.7	1.0	1.1	1.8	2.1	4.3	7.9	20.5	27.1	7.5	29.1	29.0	25.4	66.9	124.1	185.7	107.4	180.0	206.7	252.4	231.6	19.4	14.4	9.7	4.1	1.4												1565.7	9.25
18.834	38	0.1	0.2	0.2	0.2	0.2	0.1	0.3	0.5	0.4	0.6	0.7	0.9	0.8	1.1	1.2	2.1	3.2	7.9	14.9	27.1	6.9	24.9	25.4	22.5	66.9	82.7	167.1	92.1	143.2	168.4	177.0	155.1	13.1	14.6	24.0	8.7	3.7	0.9											1260.3	9.5
0	39	0.0	0.2	0.2	0.2	0.2	0.3	0.1	0.3	0.6	0.4	0.6	0.9	1.0	0.9	1.2	1.4	3.2	5.9	14.9	19.7	6.9	22.9	21.8	19.7	59.5	82.7	111.4	82.9	122.7	134.0	144.2	108.8	8.8	9.9	24.3	21.6	7.8	2.3	1.2										1045.6	9.75
	40		0.0	0.2	0.2	0.2	0.3	0.3	0.2	0.4	0.6	0.4	0.7	1.0	1.1	0.9	1.4	2.1	5.9	11.2	19.7	5.0	22.9	20.0	16.9	52.0	73.5	111.4	55.3	110.5	114.8	114.7	88.6	6.2	6.6	16.4	21.9	19.2	4.9	3.2	0.9									911.8	10
	41			0.0	0.2	0.2	0.3	0.3	0.3	0.2	0.4	0.6	0.5	0.8	1.1	1.2	1.1	2.1	4.0	11.2	14.8	5.0	16.6	20.0	15.5	44.6	64.4	99.0	55.3	73.6	103.4	98.3	70.5	5.0	4.6	11.0	14.8	19.4	12.0	6.8	2.3	1.0								782.4	10.25
	42				0.0	0.2	0.3	0.3	0.3	0.4	0.2	0.4	0.7	0.5	0.9	1.2	1.4	1.6	4.0	7.5	14.8	3.8	16.6	14.5	15.5	40.9	55.2	86.7	49.1	73.6	68.9	88.5	60.4	4.0	3.8	7.7	9.9	13.1	12.1	16.8	4.9	2.7	0.9							684.2	10.5
	43					0.0	0.3	0.3	0.3	0.4	0.4	0.2	0.5	0.8	0.6	0.9	1.4	2.1	3.0	7.5	9.8	3.8	12.5	14.5	11.3	40.9	50.6	74.3	43.0	65.5	68.9	59.0	54.4	3.4	3.0	6.3	6.9	8.8	8.2	17.0	12.0	5.8	2.3	0.9						601.6	10.75
	44						0.0	0.3	0.3	0.4	0.4	0.4	0.2	0.5	0.9	0.6	1.1	2.1	4.0	5.6	9.8	2.5	12.5	10.9	11.3	29.7	50.6	68.1	36.8	57.3	61.2	59.0	36.3	3.1	2.6	5.0	5.7	6.2	5.5	11.5	12.1	14.4	4.9	2.3	0.9					536.8	11
	45							0.0	0.3	0.4	0.4	0.4	0.5	0.3	0.6	0.9	0.7	1.6	4.0	7.5	7.4	2.5	8.3	10.9	8.5	29.7	36.8	68.1	33.8	49.1	53.6	52.5	36.3	2.1	2.3	4.3	4.5	5.0	3.9	7.7	8.2	14.6	12.0	4.9	2.3	0.9				487.3	11.25
	46								0.0	0.4	0.4	0.4	0.5	0.5	0.3	0.6	1.1	1.1	3.0	7.5	9.8	1.9	8.3	7.3	8.5	22.3	36.8	49.5	33.8	45.0	45.9	45.9	32.2	2.1	1.5	3.9	3.9	4.0	3.1	5.4	5.5	9.9	12.1	12.0	4.9	2.3	0.7			434.0	11.5
	47									0.0	0.4	0.4	0.5	0.5	0.6	0.3	0.7	1.6	2.0	5.6	9.8	2.5	6.2	7.3	5.6	22.3	27.6	49.5	24.6	45.0	42.1	39.3	28.2	1.8	1.5	2.6	3.5	3.4	2.5	4.4	3.9	6.6	8.2	12.1	12.0	4.9	1.8	0.7		392.6	11.75
	48										0.0	0.4	0.5	0.5	0.6	0.6	0.4	1.1	3.0	3.7	7.4	2.5	8.3	5.4	5.6	14.9	27.6	37.1	24.6	32.7	42.1	36.1	24.2	1.6	1.4	2.6	2.3	3.1	2.1	3.5	3.1	4.6	5.5	8.2	12.1	12.0	3.9	1.8	0.7	347.8	12
	49											0.0	0.5	0.5	0.6	0.6	0.7	0.5	2.0	5.6	4.9	1.9	8.3	7.3	4.2	14.9	18.4	37.1	18.4	32.7	30.6	36.1	22.2	1.4	1.2	2.3	2.3	2.1	1.9	3.0	2.5	3.8	3.9	5.5	8.2	12.1	9.6	3.9	1.8	313.4	12.25
	50												0.0	0.5	0.6	0.6	0.7	1.1	1.0	3.7	7.4	1.3	6.2	7.3	5.6	11.2	18.4	24.8	18.4	24.5	30.6	26.2	22.2	1.3	1.0	2.0	2.1	2.1	1.3	2.7	2.1	3.0	3.1	3.9	5.5	8.2	9.7	9.6	3.9	273.7	12.5
	51													0.0	0.6	0.6	0.7	1.1	2.0	1.9	4.9	1.9	4.2	5.4	5.6	14.9	13.8	24.8	12.3	24.5	23.0	26.2	16.1	1.3	0.9	1.7	1.8	1.8	1.3	1.8	1.9	2.6	2.5	3.1	3.9	5.5	6.6	9.7	9.6	240.4	12.75
	52														0.0	0.6	0.7	1.1	2.0	3.7	2.5	1.3	6.2	3.6	4.2	14.9	18.4	18.6	12.3	16.4	23.0	19.7	16.1	0.9	0.9	1.6	1.5	1.6	1.1	1.8	1.3	2.3	2.1	2.5	3.1	3.9	4.4	6.6	9.7	210.6	13
	53															0.0	0.7	1.1	2.0	3.7	4.9	0.6	4.2	5.4	2.8	11.2	18.4	24.8	9.2	16.4	15.3	19.7	12.1	0.9	0.7	1.6	1.4	1.4	1.0	1.6	1.3	1.5	1.9	2.1	2.5	3.1	3.1	4.4	6.6	187.6	13.25
	54																0.0	1.1	2.0	3.7	4.9	1.3	2.1	3.6	4.2	7.4	13.8	24.8	12.3	12.3	15.3	13.1	12.1	0.7	0.7	1.1	1.4	1.3	0.9	1.4	1.1	1.5	1.3	1.9	2.1	2.5	2.5	3.1	4.4	161.9	13.5
	55																	0.0	2.0	3.7	4.9	1.3	4.2	1.8	2.8	11.2	9.2	18.6	12.3	16.4	11.5	13.1	8.1	0.7	0.5	1.1	1.0	1.3	0.8	1.2	1.0	1.4	1.3	1.3	1.9	2.1	2.0	2.5	3.1	144.1	13.75
	56																		0.0	3.7	4.9	1.3	4.2	3.6	1.4	7.4	13.8	12.4	9.2	16.4	15.3	9.8	8.1	0.5	0.5	0.9	1.0	0.9	0.8	1.1	0.9	1.2	1.1	1.3	1.3	1.9	1.7	2.0	2.5	131.1	14
	57																			0.0	4.9	1.3	4.2	3.6	2.8	3.7	9.2	18.6	6.1	12.3	15.3	13.1	6.0	0.5	0.3	0.9	0.8	0.9	0.6	1.1	0.8	1.0	1.0	1.1	1.3	1.3	1.5	1.7	2.0	117.9	14.25
	58																				0.0	1.3	4.2	3.6	2.8	7.4	4.6	12.4	9.2	8.2	11.5	13.1	8.1	0.3	0.3	0.6	0.8	0.7	0.6	0.8	0.8	0.9	0.9	1.0	1.1	1.3	1.0	1.5	1.7	100.7	14.5
	59																					0.0	4.2	3.6	2.8	7.4	9.2	6.2	6.1	12.3	7.7	9.8	8.1	0.5	0.3	0.6	0.5	0.7	0.4	0.8	0.6	0.9	0.8	0.9	1.0	1.1	1.0	1.0	1.5	90.0	14.75
	60																						0.0	3.6	2.8	7.4	9.2	12.4	3.1	8.2	11.5	6.6	6.0	0.5	0.3	0.4	0.5	0.5	0.4	0.6	0.6	0.7	0.8	0.8	0.9	1.0	0.9	1.0	1.0	81.7	15
	61																							0.0	2.8	7.4	9.2	12.4	6.1	4.1	7.7	9.8	4.0	0.3	0.3	0.6	0.4	0.5	0.3	0.6	0.4	0.7	0.6	0.8	0.8	0.9	0.8	0.9	1.0	73.4	15.25
	62																								0.0	7.4	9.2	12.4	6.1	8.2	3.8	6.6	6.0	0.2	0.3	0.6	0.5	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.8	0.8	0.7	0.8	0.9	68.4	15.5
	63																									0.0	9.2	12.4	6.1	8.2	7.7	3.3	4.0	0.3	0.2	0.4	0.5	0.5	0.2	0.4	0.3	0.5	0.4	0.6	0.6	0.8	0.6	0.7	0.8	56.7	15.75
	64																										0.0	12.4	6.1	8.2	7.7	6.6	2.0	0.2	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.6	0.6	0.6	0.7	49.7	16
	65																											0.0	6.1	8.2	7.7	6.6	4.0	0.1	0.2	0.4	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.4	0.4	0.6	0.5	0.6	0.6	38.5	16.25
	66																												0.0	8.2	7.7	6.6	4.0	0.2	0.1	0.3	0.4	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	[illegible]	16.5
	67																													0.0	7.7	6.6	4.0	0.2	0.2	0.1	0.3	0.3	0.1	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.5	0.5	22.9	16.75
	68																														0.0	6.6	4.0	0.2	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.5	[illegible]	17
	69																															0.0	4.0	0.2	0.2	0.3	0.3	0.1	0.1	0.3	0.1	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	[illegible]	17.25
	70																																0.0	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	[illegible]	17.5
	71																																	0.0	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.3	0.3	0.2	0.2	0.2	[illegible]	17.75
	72																																		0.0	0.3	0.3	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.3	0.2	0.2	0.2	[illegible]	18
	73																																			0.0	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	[illegible]	18.25
	74																																				0.0	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	[illegible]	18.5
	75																																					0.0	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	[illegible]	18.75
	76																																						0.0	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	[illegible]	19
	77																																							0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	[illegible]	19.25
	78																																								0.0	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	[illegible]	19.5
	79																																									0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.9	19.75
	80																																										0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.7	20
	81																																											0.0	0.1	0.1	0.1	0.1	0.1	[illegible]	20.25
	82																																												0.0	0.1	0.1	0.1	0.1	[illegible]	20.5
	83																																													0.0	0.1	0.1	0.1	[illegible]	20.75
	84																																														0.0	0.1	0.1	[illegible]	21
	85																																															0.0	0.1	[illegible]	21.25
	86																																																0.0	[illegible]	21.5

Flood Hydrograph (cfs)	Time (hour)	
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3220	**7.75**	PEAK ADJU

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100-Year Flood Hydrograph, Blythe Mesa Drainage
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DISCHARGE (CFS)
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5
10
15
20
25
TIME (HOURS)
Flood Hydrograph
PEAK

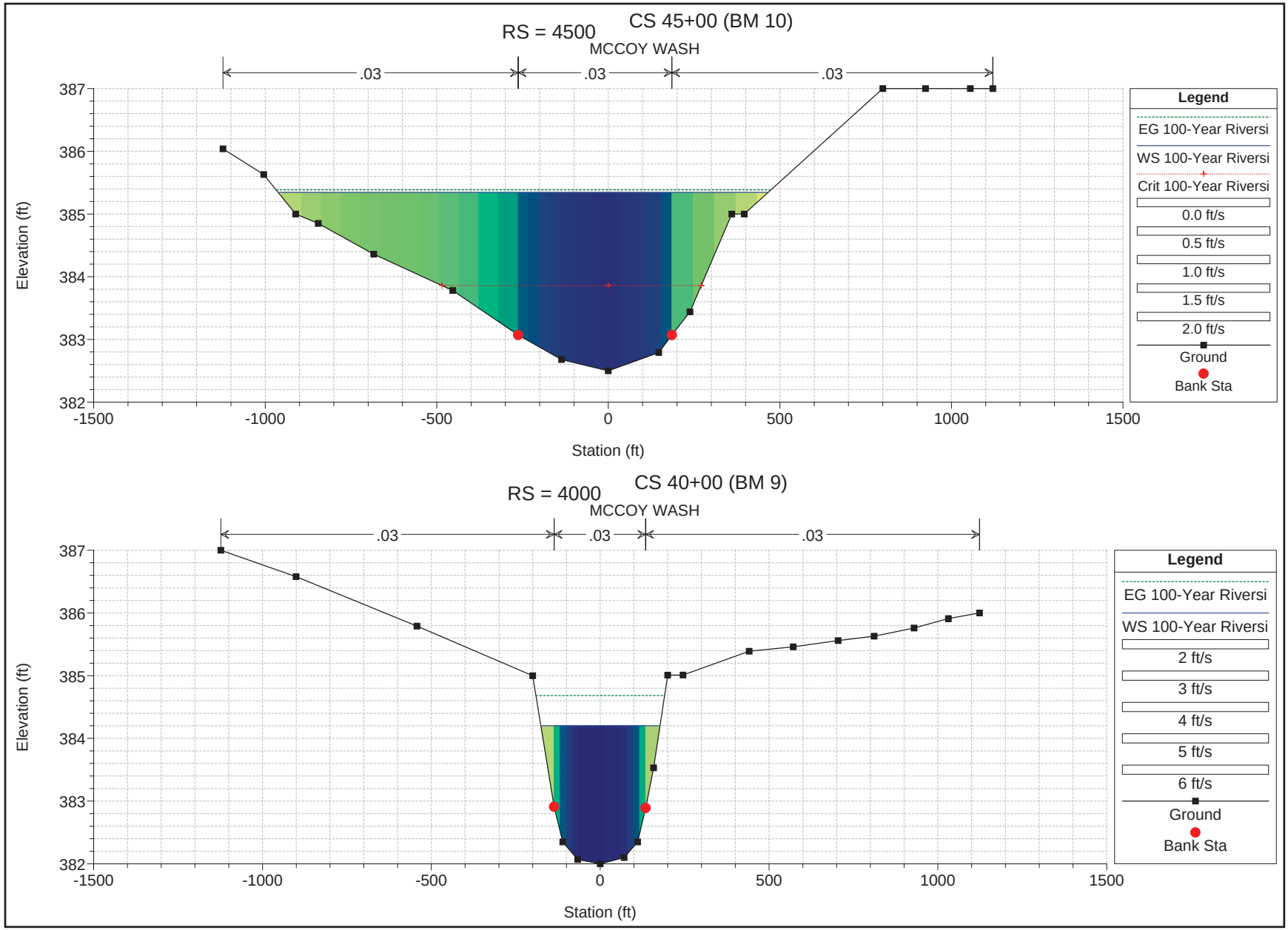
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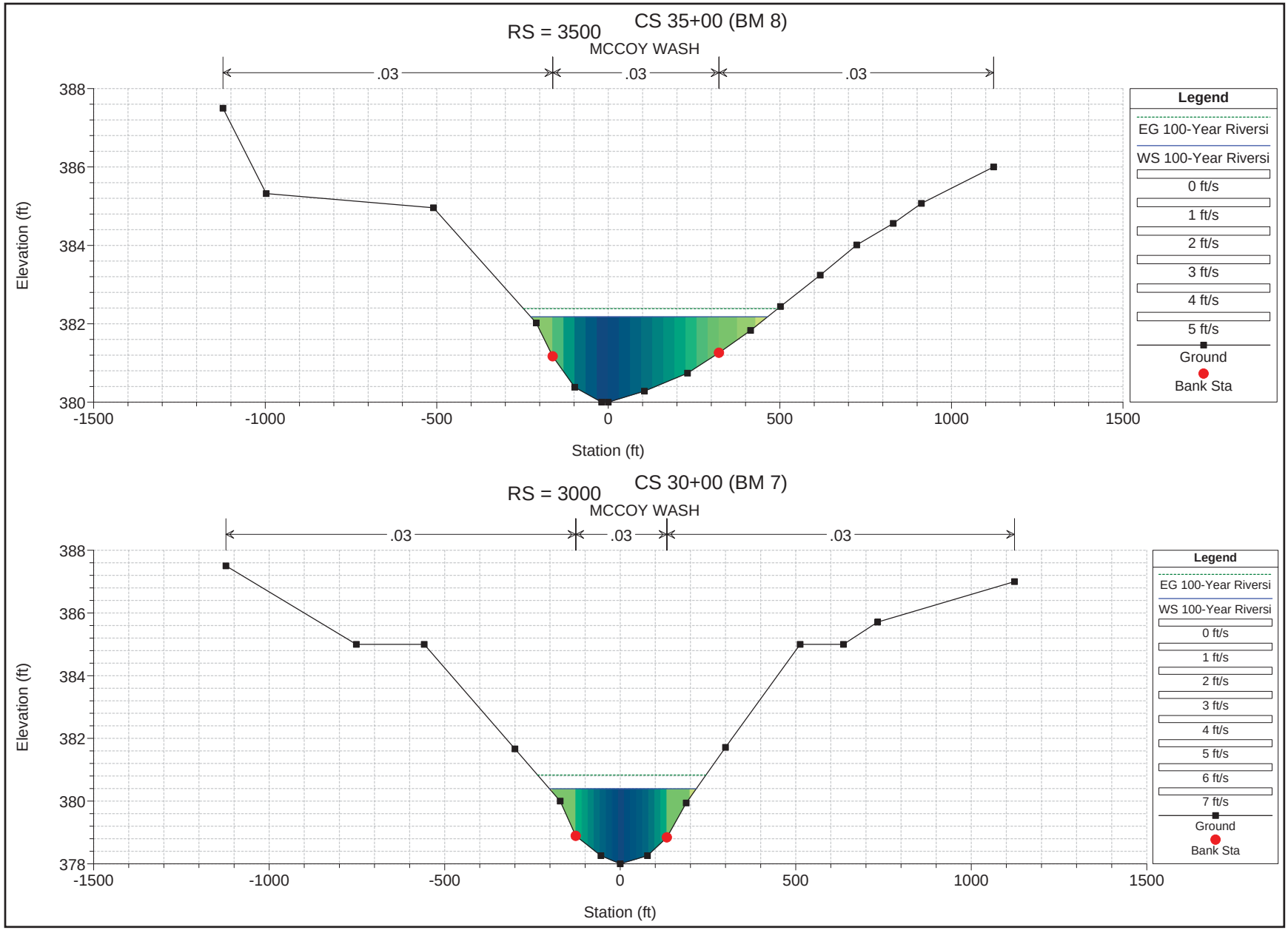
APPENDIX B

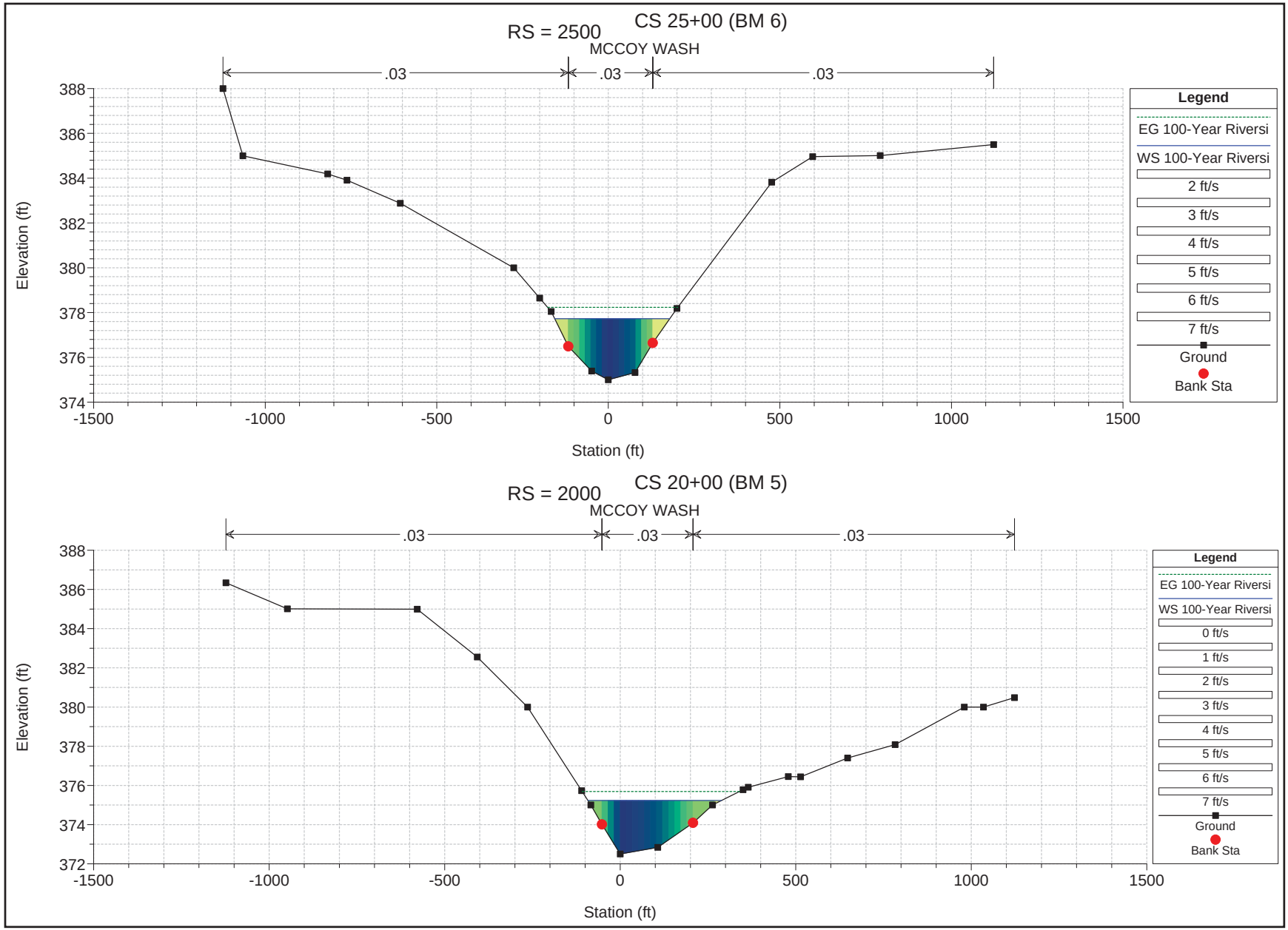
100-year Cross-Sections

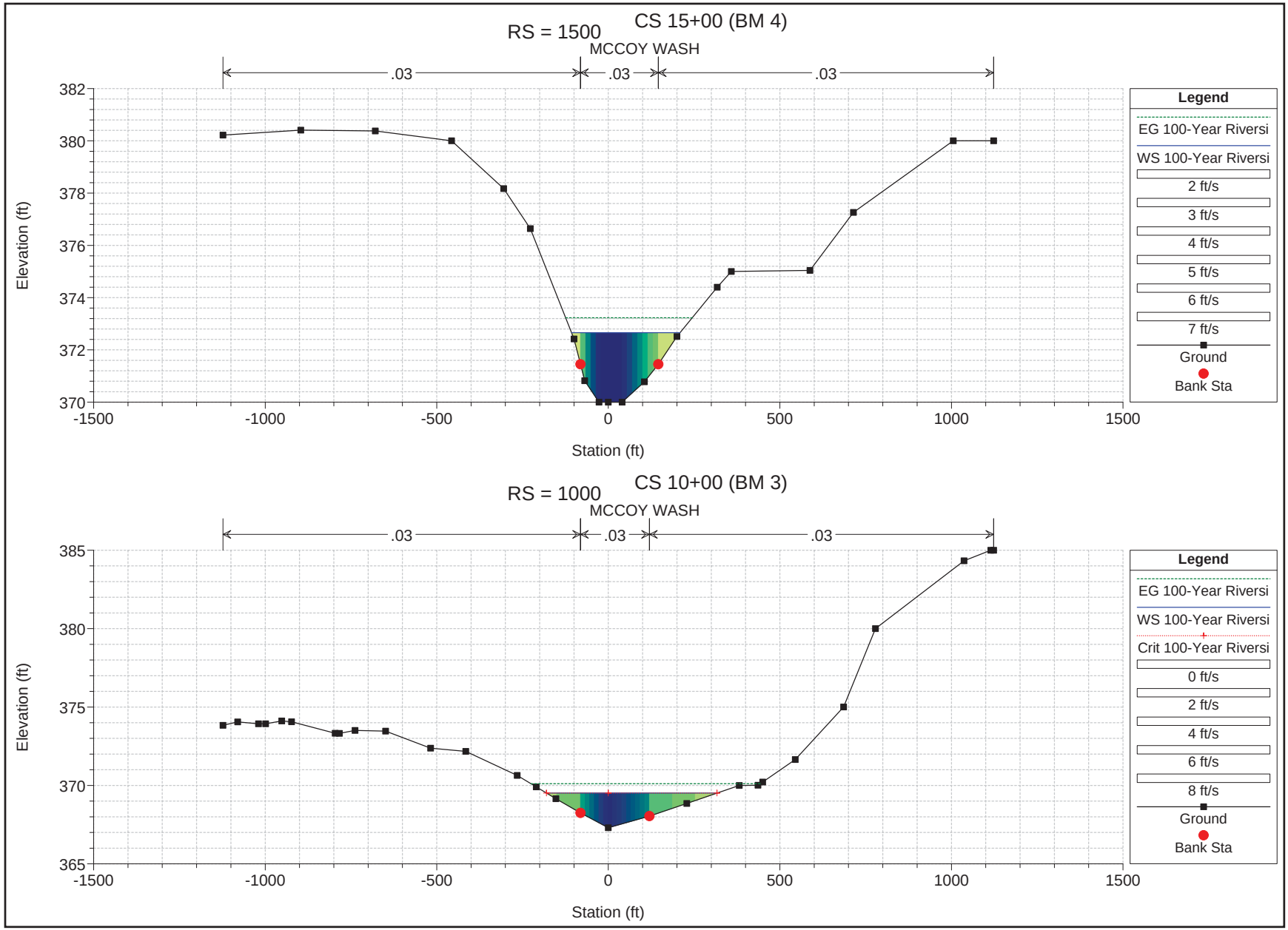
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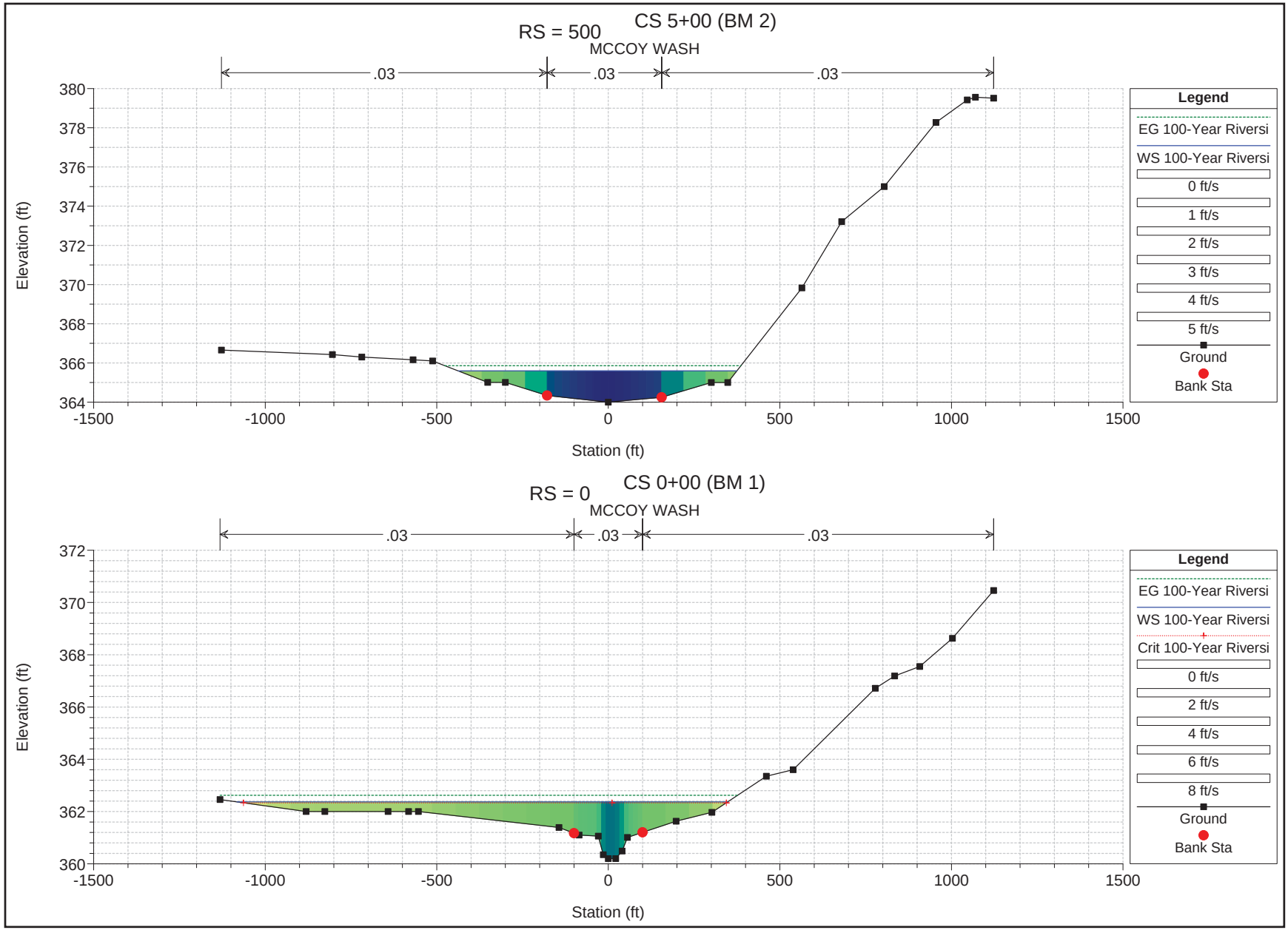
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RS = 4500
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Elevation (ft)
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RS = 2500
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Ground
Bank Sta


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3 ft/s
4 ft/s
5 ft/s
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CS 0+00 (BM 1)
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Ground
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APPENDIX C
Scour Calculations

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Table 1: Preliminary Scour Analysis

Note: 1. Please refer to the "HEC-18 Description" Worksheet in this workbook for a complete description of the HEC-18 scour equation and a description of the associated variables.
2. Average depths in the left and right overbank areas is assumed for comparison purposes.

Calculation Table

HEC-18 Formula Variables-->		Left Fr1	Fr1	Right Fr1	Left y1	y1	Right y1	Left V1	Channel V1	Right V1	a	K1	K2	K3	Left ys	ys	Right ys
Reach	River Sta (ft)	Froude #, Left	Froude # Channel	Froude #, Right	Average Depth, Left (ft)	Max Channel Depth (ft)	Average Depth, Right (ft)	Average Velocity Left (ft/s)	Channel Velocity (ft/s)	Average Velocity Right (ft/s)	Pier Width (ft)	Pier Nose Correction Factor	Correction Factor for Angle of Attack	Correction Factor for Bed Condtion	Maximum Scour Left (ft)	Maximum Scour Channel (ft)	Maximum Scour Right (ft)
BM 10	4500	0.183276	0.19	0.162129	1	2.85	1	1.04	1.79	0.92	0.33	1	1	1.1	0.52	0.76	0.49
BM 9	4000	0.470526	0.69	0.308397	1	2.23	1	2.67	5.47	1.75	0.33	1	1	1.1	0.77	1.21	0.65
BM 8	3500	0.274914	0.51	0.281963	1	2.18	1	1.56	3.74	1.6	0.33	1	1	1.1	0.61	1.05	0.62
BM 7	3000	0.447616	0.68	0.489911	1	2.39	1	2.54	5.5	2.78	0.33	1	1	1.1	0.76	1.23	0.79
BM 6	2500	0.442329	0.69	0.405322	1	2.73	1	2.51	5.79	2.3	0.33	1	1	1.1	0.75	1.30	0.73
BM 5	2000	0.41942	0.67	0.373601	1	2.73	1	2.38	5.55	2.12	0.33	1	1	1.1	0.74	1.28	0.70
BM 4	1500	0.433518	0.73	0.449378	1	2.66	1	2.46	6.16	2.55	0.33	1	1	1.1	0.75	1.32	0.76
BM 3	1000	0.597409	0.89	0.659088	1	2.22	1	3.39	6.77	3.74	0.33	1	1	1.1	0.86	1.35	0.89
BM 2	500	0.47405	0.68	0.549828	1	1.59	1	2.69	4.6	3.12	0.33	1	1	1.1	0.78	1.07	0.83
BM 1	0	0.421182	0.73	0.509296	1	2.17	1	2.39	5.15	2.89	0.33	1	1	1.1	0.74	1.23	0.80
Arrays																	
Point 1	4000	0.68196			2.02			5.5			0.33	1	1	1.1	1.16		
Point 2	3000			0.597303			2.09			4.9	0.33	1	1	1.1			1.11
Point 3	3000			0.657236			1.87			5.1	0.33	1	1	1.1			1.11
Point 4	2500			0.391839			1.07			2.3	0.33	1	1	1.1			0.73
Point 5	2500			0.55642			1.3			3.6	0.33	1	1	1.1			0.91
Point 6	500			0.643489			0.3			2	0.33	1	1	1.1			0.58

Scour Summary Table

Maximum Scour Left (in)	Maximum Scour Channel (in)	Maximum Scour Right (in)
6	9	6
9	14	8
7	13	7
9	15	9
9	16	9
9	15	8
9	16	9
10	16	11
9	13	10
9	15	10
14		
		13
		13
		9
		11
		7

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HEC-18 Pier Scour Equation

Reference: Hydraulic Engineering Circular No. 18, "Evaluating Scour at Bridges, Fifth Edition" U.S. Department of Transportation, Federal Highway Administration, April 2012

7.2 HEC-18 PIER SCOUR EQUATION

The HEC-18 pier scour equation (based on the CSU equation) is recommended for both live-bed and clear-water pier scour. The equation predicts maximum pier scour depths. Basic applications include simple pier substructure configurations and riverine flow situations in alluvial sand-bed channels. The equation can be adapted for wide pier applications (Section 7.4), more complex (3-element) substructure configurations (Section 7.5), multiple columns skewed to the flow (Section 7.6), estimating scour from debris on piers (Section 7.7), and scour in tidal waterways (Chapter 9). An alternative approach that represents the complexity of the bridge pier scour flow field and the full range of pier geometries (narrow, transition and wide as described in Section 3.6.2) is presented in Section 7.3.

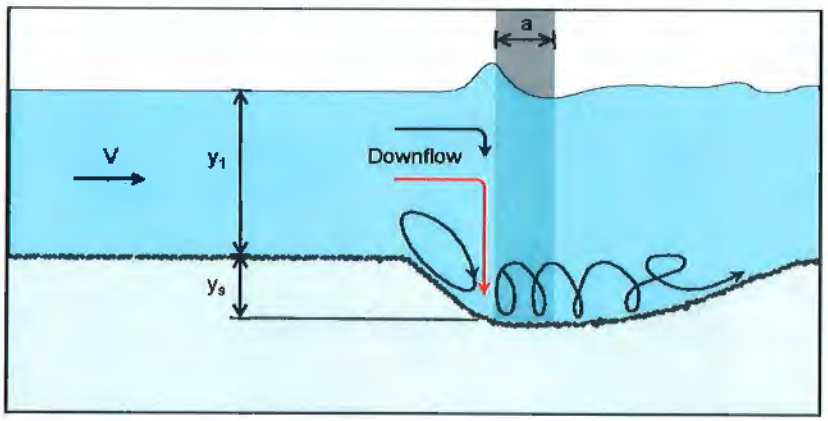


Figure 7.2. Definition sketch for pier scour.

The HEC-18 equation is:

$$\frac{y_s}{y_1} = 2.0\, K_1\, K_2\, K_3 \left(\frac{a}{y_1}\right)^{0.65} Fr_1^{0.43} \qquad (7.1)$$

As a Rule of Thumb, the maximum scour depth for round nose piers aligned with the flow is:

$y_s \leq 2.4$ times the pier width (a) for $Fr \leq 0.8$
$y_s \leq 3.0$ times the pier width (a) for $Fr > 0.8$ (7.2)

In terms of y_s/a, Equation 7.1 is:

$$\frac{y_s}{a} = 2.0\, K_1\, K_2\, K_3 \left(\frac{y_1}{a}\right)^{0.35} Fr_1^{0.43} \qquad (7.3)$$

where:

- y_s = Scour depth, ft (m)
- y_1 = Flow depth directly upstream of the pier, ft (m)
- K_1 = Correction factor for pier nose shape from Figure 7.3 and Table 7.1
- K_2 = Correction factor for angle of attack of flow from Table 7.2 or Equation 7.4
- K_3 = Correction factor for bed condition from Table 7.3
- a = Pier width, ft (m)
- L = Length of pier, ft (m)
- Fr_1 = Froude Number directly upstream of the pier = $V_1/(gy_1)^{1/2}$
- V_1 = Mean velocity of flow directly upstream of the pier, ft/s (m/s)
- g = Acceleration of gravity (32.2 ft/s^2) (9.81 m/s^2)

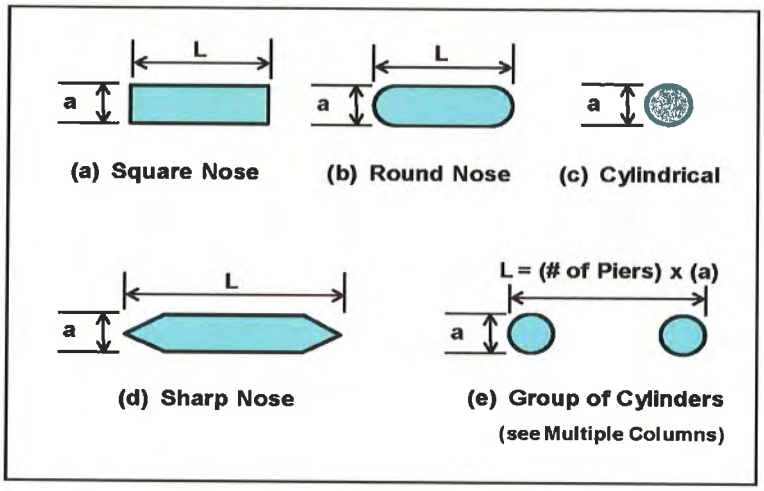


Figure 7.3. Common pier shapes.

The correction factor, K_2, for angle of attack of the flow, 2, is calculated using the following equation:

$$K_2 = (\text{Cos } \theta + \frac{L}{a} \text{ Sin } \theta)^{0.65} \qquad (7.4)$$

If L/a is larger than 12, use L/a = 12 as a maximum in Equation 7.4 and Table 7.2. Table 7.2 illustrates the magnitude of the effect of the angle of attack on local pier scour.

Table 7.1. Correction Factor, K_1, for Pier Nose Shape.

Shape of Pier Nose	K_1
(a) Square nose	1.1
(b) Round nose	1.0
(c) Circular cylinder	1.0
(d) Group of cylinders	1.0
(e) Sharp nose	0.9

Table 7.2. Correction Factor, K_2, for Angle of Attack, 2, of the Flow.

Angle	L/a=4	L/a=8	L/a=12
0	1.0	1.0	1.0
15	1.5	2.0	2.5
30	2.0	2.75	3.5
45	2.3	3.3	4.3
90	2.5	3.9	5.0

Angle = skew angle of flow
L = length of pier

Table 7.3. Increase in Equilibrium Pier Scour Depths, K_3, for Bed Condition.		
Bed Condition	Dune Height ft	K_3
Clear-Water Scour	N/A	1.1
Plane bed and Antidune flow	N/A	1.1
Small Dunes	$10 > H \geq 2$	1.1
Medium Dunes	$30 > H \geq 10$	1.2 to 1.1
Large Dunes	$H \geq 30$	1.3

Notes:

1. The correction factor K_1 for pier nose shape should be determined using Table 7.1 for angles of attack up to 5 degrees. **For greater angles, K_2 dominates and K_1 should be considered as 1.0.** If L/a is larger than 12, use the values for L/a = 12 as a maximum in Table 7.2 and Equation 7.4.

2. The values of the correction factor K_2 should be applied only when the field conditions are such that the entire length of the pier is subjected to the angle of attack of the flow. Use of this factor will result in a significant over-prediction of scour if (1) a portion of the pier is shielded from the direct impingement of the flow by an abutment or another pier; or (2) an abutment or another pier redirects the flow in a direction parallel to the pier. For such cases, judgment must be exercised to reduce the value of the K_2 factor by selecting the effective length of the pier actually subjected to the angle of attack of the flow. **Equation 7.4 should be used for evaluation and design.** Table 7.2 is intended to illustrate the importance of angle of attack in pier scour computations and to establish a cutoff point for K_2 (i.e., a maximum value of 5.0).

3. The correction factor K_3 results from the fact that for plane-bed conditions, which is typical of most bridge sites for the flood frequencies employed in scour design, the maximum scour may be 10 percent greater than computed with Equation 7.1. In the unusual situation where a dune bed configuration with large dunes exists at a site during flood flow, the maximum pier scour may be 30 percent greater than the predicted equation value. This may occur on very large rivers, such as the Mississippi. For smaller streams that have a dune bed configuration at flood flow, the dunes will be smaller and the maximum scour may be only 10 to 20 percent larger than equilibrium scour. For antidune bed configuration the maximum scour depth may be 10 percent greater than the computed equilibrium pier scour depth.

4. Piers set close to abutments (for example at the toe of a spill through abutment) must be carefully evaluated for the angle of attack and velocity of the flow coming around the abutment.

APPENDIX I
PALEONTOLOGICAL RESOURCES SURVEY REPORT

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BLYTHE MESA I SOLAR PROJECT**,**
PALEONTOLOGICAL RESOURCES SURVEY REPORT,
Riverside County, California

by

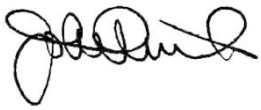
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Anaheim, CA 92805
(714) 507-2700

September 20, 2011
Revised January 5, 2012

The undersigned certifies that the attached report
is a true and accurate description of the results of a
paleontological assessment described herein.



John A. Minch, PhD.
Principal Investigator
CA Professional Geologist#3269

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EXECUTIVE SUMMARY

This Paleontological Resources Survey Report documents the findings of a paleontological study conducted by John Minch and Associates, Inc. for the Blythe Mesa I Solar Project, Palo Verde Mesa region, Riverside County, California. The 3,660-acre Project site is located in eastern Riverside County in the Palo Verde Mesa region, approximately 5 miles west of Blythe, California.

The investigation study included: a literature review, records search at the San Bernardino County Museum (SBCM) and databases from the University of California Berkeley Museum of Paleontology (UCMP), and this report which were completed using currently accepted paleontologic methods that satisfy mitigation requirements for paleontological resources. This survey investigation was performed in order to: 1) evaluate existing paleontological resources, 2) determine the impact to identified and/or anticipated paleontological resources resulting from the proposed project, and 3) to determine appropriate mitigation measures necessary to minimize anticipated adverse impacts, if any, to paleontological resources resulting from construction of the project.

The majority of the project site is underlain by Pleistocene alluvium of the Palo Verde Mesa (= unit Qpv) and locally Quaternary Alluvium of Holocene age. The Qpv/Qoa on site has a high potential to contain significant paleontological resources. No recorded fossil localities are known from the project site. It is recommended that a qualified vertebrate paleontologist be retained to develop a Paleontological Mitigation Plan (PMP) to mitigate any impacts to significant nonrenewable paleontological resources

INTRODUCTION

At the request of Power Engineers, Inc. and Renewable Resources Group, Inc. , John Minch and Associates, Inc. [JMA] has undertaken a Paleontological Resources Survey Report for the proposed Blythe Mesa I Solar Project, Riverside County, California. (Figure 1). The purpose of this Study is to identify the potential paleontological resource impacts associated with the proposed Blythe Mesa I Solar Project (Project) on 3,660 acres in eastern Riverside County (County). This study has been prepared in conformance with the California Environmental Quality Act (CEQA) Guidelines (Guidelines) that implement CEQA and the County's implementation procedures for CEQA. The survey was performed in order to: (1) evaluate existing paleontological resources of the site and surrounding area, (2) determine if the proposed Project poses any significant adverse impact to existing paleontological resources, and (3) to outline appropriate mitigation measures (if any) in order to minimize adverse impacts to the paleontological resources.

The 3,660-acre Project site is located in eastern Riverside County in the Palo Verde Mesa region, approximately 5 miles west of Blythe, north and south of Interstate 10 and west of State Route 89 and Highway 95 (see Figure 1). The site occupies the eastern part of the broad and relatively flat Palo Verde Mesa bounded to the east by a low 30 to 50 bluff that descends to the Colorado River Valley. Specifically, the Project is located on the McCoy Wash, California (1951 edition, photorevised 1970), the Ripley, California (1952 edition, photorevised 1970), and the Roosevelt Mine, California (1983 provisional edition) 7.5' United States Geological Survey topographic quadrangle maps (Figure 2).

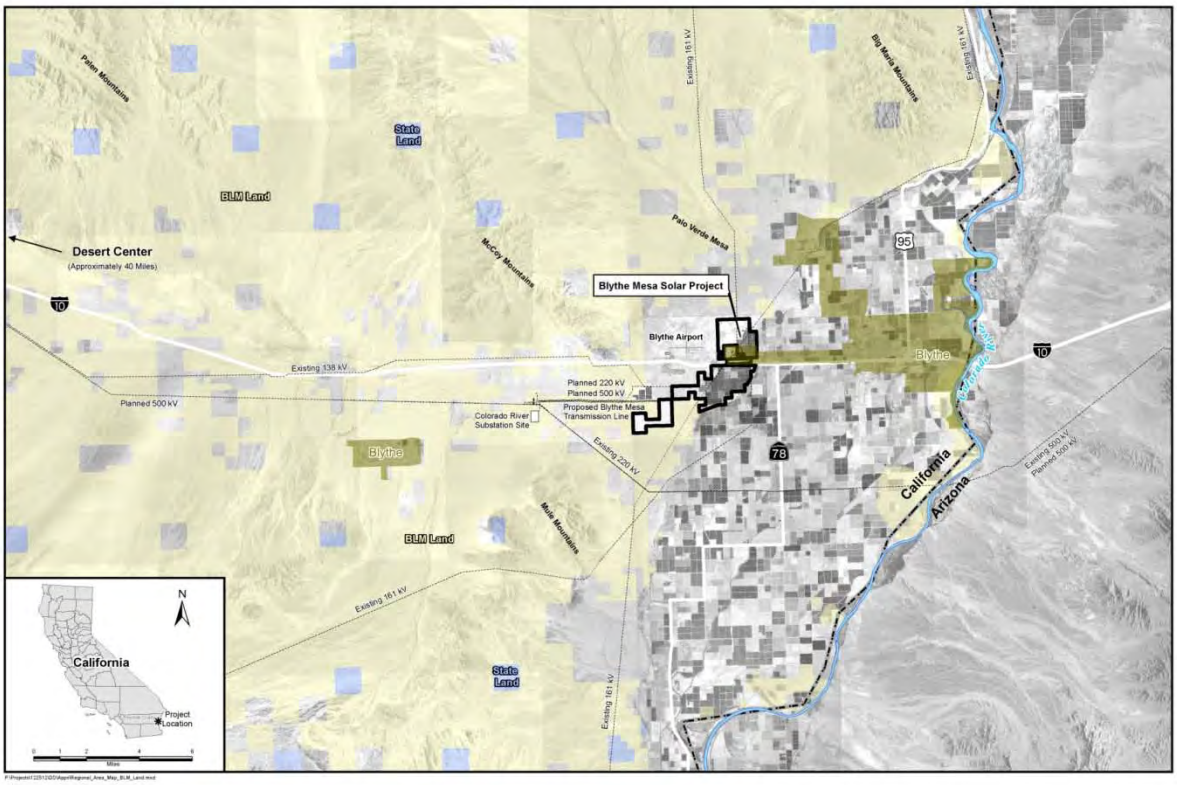


Figure 1. - Regional Location Map

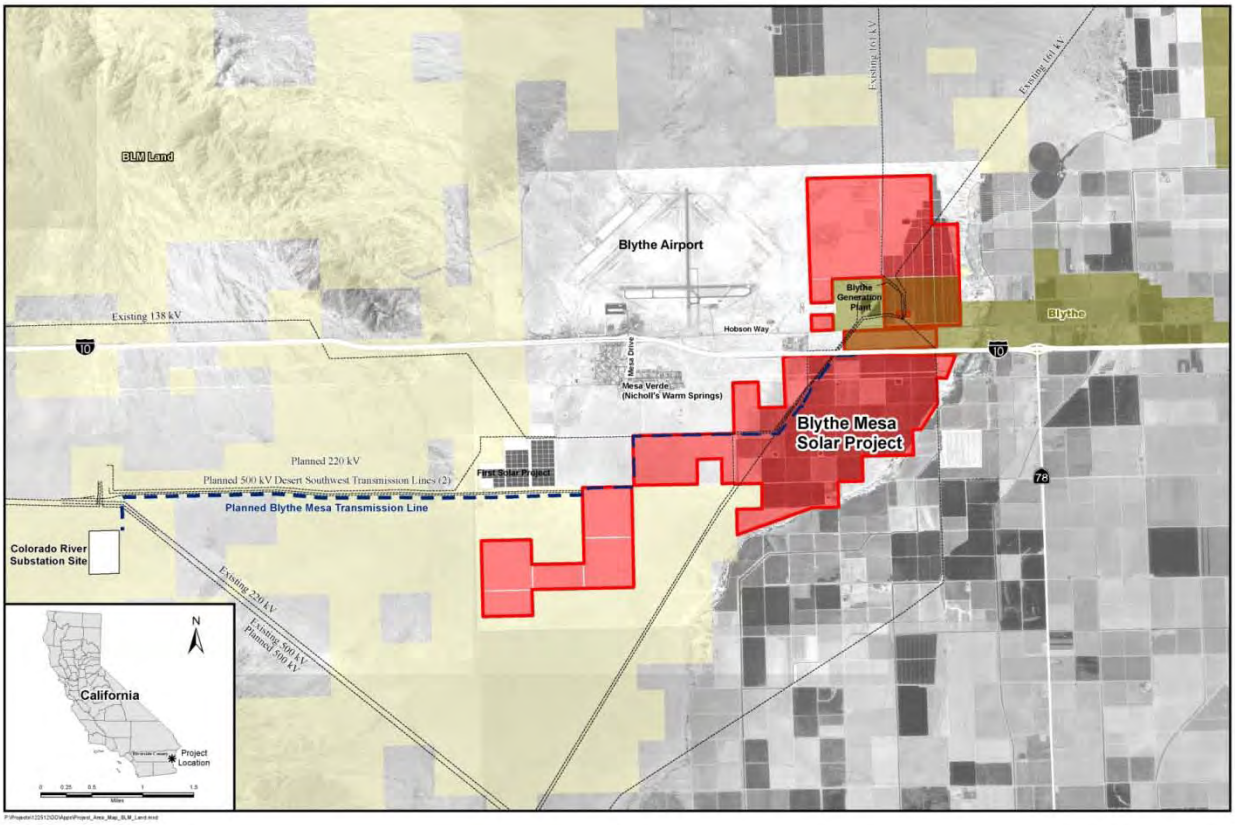


Figure 2. - Study Area.

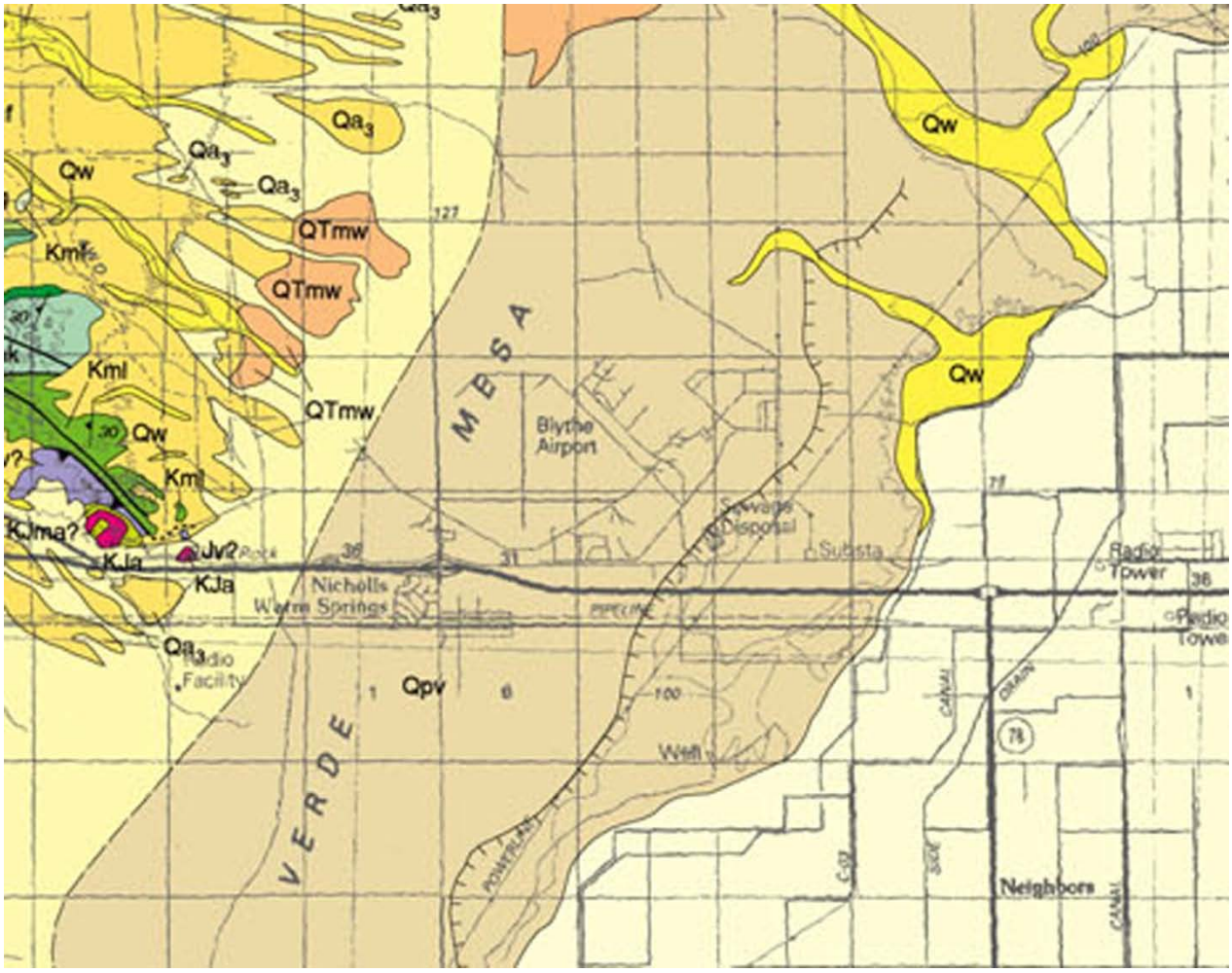


Figure 3. Geologic Map of Project area. (Stone, 2006)

Qpv = Alluvial sediments of Palo Verde Mesa

Qw = Alluvium of modern washes

METHODOLOGY OF LITERATURE AND RECORDS SEARCH

Tasks completed during literature search:

- Review of available geologic and paleontologic literature pertinent to the site, including existing lists of fossils and fossil localities.
- Review of available environmental impact and/or geotechnical reports pertinent to development of the site.
- Review of records searches at the San Bernardino County Museum (SBCM) and databases from the University of California Berkeley Museum of Paleontology (UCMP).

RESULTS OF LITERATURE AND RECORDS SEARCH

Available literature considered pertinent to the site, including previously recorded lists of fossils and paleontological fossil localities recorded for the general site vicinity, was reviewed. The purpose of the literature search was to determine: (1) pertinent geologic and paleontologic site information, and (2) the paleontologic sensitivity of identified and/or anticipated geologic units underlying the site.

The literature search included a review of all available data pertinent to the site, including environmental reports, professional geological publications, paleontological consultant reports, and other unpublished documents related to regional and/or detailed geologic studies. The review also included the location of geologic maps delineating the geology of the rock formations underlying the project site (Stone, 2006).

Records searches at the San Bernardino County Museum (SBCM) and review of databases from the University of California Berkeley Museum of Paleontology (UCMP) provided additional data and insured that the JMA review of the literature and records was complete. Pertinent sections of this literature and records review report are included in this document. For security purposes the specific locations of the fossil localities is not included in this report.

No recorded fossil localities were located within the boundaries of the project site during the review of the SBCM and UCMP records, fossil lists, published and unpublished literature.

GEOLOGY/BIOSTRATIGRAPHY

The geology of the Blythe area has been described by Stone (2006) at a scale of 1:100,000. This 2006 map was modified from Stone (1990) which was compiled primarily from Hamilton (1964, 1984), Tosdal (1988), Stone and Pelka (1989), and Ballard (1990).

As delineated on the Blythe 30' by 60' geologic map (Stone, 2006) (Figure 3) the majority of the project site is underlain by unit Qpv. Qpv is defined as the Alluvial Deposits of the Palo Verde Mesa of Pleistocene age. Minor amounts of Alluvium (Qa) of Holocene (Recent) age underlies a small area in the NE part of the site. No construction is planned in the areas underlain by Qa. The Quaternary Alluvium and the Alluvial Deposits of the Palo Verde Mesa are discussed in this section. For completeness these units, which do not outcrop on the Project a brief discussion of the relationships of the Latest Tertiary and Quaternary Surficial Deposits is included here (abstracted from Stone, 2006).

Latest Tertiary and Quaternary Surficial Deposits

Alluvial-fan and alluvial-valley deposits (Holocene to Miocene)

These deposits consist of angular to subangular gravel and sand derived from local mountain ranges. Mostly unconsolidated to weakly consolidated, the oldest deposits are locally well consolidated. The deposits are divided into six units distinguished by contrasting surficial and geomorphic characteristics.

These surficial deposits form most of the land surface west of Blythe. Most of these deposits are composed of alluvium derived from local mountain ranges. These locally derived middle Pleistocene to Holocene alluvial-fan deposits are divided based on their surface morphology and their appearance on aerial photographs. They are interpreted as the products of aggradation events that took place during interglacial climatic

environments (Bull, 1991). The youngest locally derived alluvium occupies modern washes incised into the older alluvial-fan deposits.

Alluvial deposits of the ancestral Colorado River (Pleistocene and Pliocene)

These are unconsolidated to well consolidated alluvial deposits of moderately to well sorted clay, silt, sand, and gravel derived from distant sources and deposited by the ancestral Colorado River; exposed primarily along bluffs and mesas bordering the modern Colorado River flood plain. Clay, silt, and sand deposits are light in color, commonly well laminated, and typically friable; gravels and conglomerates consist of rounded pebbles and cobbles of resistant lithology, primarily quartzite and other siliceous rock types. As mapped, some units also include locally derived alluvial-fan deposits.

These alluvium units deposited by the Colorado River are concentrated along the margins of the Colorado River flood plain, where they interfinger with locally derived alluvium. These high-standing units represent one or more major aggradational events when the ancestral Colorado River flowed across the area at much higher elevations than the modern river. Metzger and others (1973) recognized two major pre-Holocene aggradations, one of probable Pliocene-Pleistocene age and the other probably middle to late Pleistocene, each of which was followed by a period of degradation. The last degradation was followed by Holocene aggradation that has deposited the sediments of the modern flood plain (Metzger and others, 1973).

GEOLOGIC UNITS ON SITE

Alluvium of modern washes - Qw (Holocene, 11,000 to present)

These units are unconsolidated**,** angular to subangular gravel and sand, locally derived and grade downstream into pebbly and sandy distal deposits. Mapped areas include McCoy Wash and closely spaced smaller washes. Wash deposits grade laterally and downstream into young alluvial sand and gravel.

Alluvial deposits of Palo Verde Mesa - Qpv (middle to late Pleistocene)

The alluvial deposits of the Palo Verde Mesa are composed of unconsolidated sand and pebbly sand containing a mixture of local and river pebbles are moderately to poorly exposed on the Palo Verde Mesa. These unconsolidated of weakly consolidated

sediments are locally well exposed along the scarp of Palo Verde Mesa, which bounds the flood plain of the Colorado River. Scarp exposures typically consist of an upper, slope-forming unit of tan to light-gray, sandy and pebbly alluvium and a lower, cliff-forming unit of light-reddish-brown, interbedded fine- grained sand, silt, and clay. Exposures of Qpv to the Northeast are overlain by, and may interfinger with alluvial-fan deposits. The Qpv Deposits are interpreted to be fluvial river deposits of probable middle to late Pleistocene age. (Stone, 2006)

PALEONTOLOGIC RESOURCES ON AND NEAR THE PROJECT SITE

The review of the LACM and UCMP records, fossil lists, published and unpublished literature indicated that no known paleontologic resource localities are recorded from the study area. However, Jefferson (1991) listed one locality, UCMP V60004, from the Blythe area. Pleistocene Colorado River alluvium in the Needles area, has yielded the remains of an extinct mammoth (Mammuthus sp.) (Agenbroad and others, 1992), and Colorado River delta deposits in northwestern Sonora have yielded thousands of vertebrate fossils (Shaw, 1981; Croxen and others, 2007).

REGIONAL PALEONTOLOGICAL RESOURCES OF SITE UNITS

The SBCM records search results also indicate that similar river alluvium elsewhere in the eastern Mojave, in Arizona, and in Sonora, Mexico, has reliably and consistently yielded vertebrate fossil remains (Shaw, 1981; Jefferson, 1991; Agenbroad and others, 1992).

Older Alluvium (Qoa) Alluvial deposits of Palo Verde Mesa - Qpv

Older Pleistocene alluvial sediments, mapped as Qa and Qoa, elsewhere in California (principally in southern California) have been reported to yield significant fossils of extinct animals from the Ice Age (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Scott, 1997; Springer and others, 1998, 2007), as well as fossil plants (Reynolds and Reynolds, 1991; Anderson and others, 2002). Fossils vertebrates recovered from these Pleistocene sediments represent

extinct taxa including mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, large and small horses, large and small camels, and bison (Jefferson, 1991; Reynolds and Reynolds, 1991; Woodburne, 1991; Springer and Scott, 1994; Scott, 1997; Springer and others, 1998, 2007).

Recent Alluvium (Qa/Qw)

Recent Alluvium is less than 11,000 years and is not considered to contain paleontological resources. However; it is often difficult to distinguish Recent Alluvium from Older Alluvium when deposition was continuous and many areas mapped as Qa are really Qoa.

SENSITIVITY AND SIGNIFICANCE OF POTENTIAL PALEONTOLOGICAL RESOURCES

Known sedimentary units of Late Pleistocene to Recent age are exposed at the site. Older Alluvium underlies the majority of the area covered by the project. The Older alluvial sediments of the area are considered to be of high paleontologic sensitivity and are known to contain significant fossils in other parts of southern California. There is a high potential for significant paleontological resources on the portion of the site underlain by Quaternary Alluvium

Older Alluvium - Alluvial deposits of Palo Verde Mesa

The fossils recovered from this unit are considered to be significant and of high scientific value. The sediments of the Older Alluvium are assigned a high paleontologic sensitivity.

Recent Alluvium

This alluvium has low potential to contain significant nonrenewable paleontologic resources subject to adverse impact by development-related excavation, and so is assigned low paleontologic sensitivity. However, this unit is typically thin and can overlie units of moderate or high paleontologic sensitivity.

IMPACTS TO POTENTIAL PALEONTOLOGICAL RESOURCES

Grading and excavation in conjunction with development would have high potential to adversely impact significant nonrenewable paleontologic resources that may be present within the boundaries of the project property, depending upon the lithology of the Pleistocene older alluvial sediments present. These operations potentially would result in significant and adverse impacts to fossil resources unless proper mitigation measures are implemented.

CONCLUSIONS AND RECOMMENDATIONS FOR MITIGATION MEASURES

A qualified vertebrate paleontologist shall develop a Paleontologic Mitigation Program/Plan to mitigate impacts and to guide the recovery of any significant nonrenewable paleontologic resources. This PMP shall be consistent with the provisions of the California Environmental Quality Act (Scott and Springer, 2003), as well as with regulations currently implemented by the County of Riverside and the proposed guidelines of the Society of Vertebrate Paleontology. This program shall include, but not be limited to:

1. The qualified vertebrate paleontologist who is a Registered Professional Geologist should direct paleontologic monitoring, by a qualified paleontologic monitor, during excavations in areas underlain by geologic units identified as having a high paleontologic sensitivity and likely to contain paleontologic resources. Areas of concern include all previously- undisturbed paleontologic sensitive sediments of the fossiliferous Pleistocene Palo Verde Mesa Alluvium.

2. Paleontologic monitors shall be equipped to salvage fossils as unearthed, to avoid construction delays, and to remove samples of sediments likely to contain the remains of small fossil invertebrates and vertebrates. Monitors shall be empowered to temporarily halt or divert equipment to allow removal of abundant or large specimens.

3. Preparation of recovered specimens to a point of identification and permanent

preservation, including washing of sediments to recover small invertebrates and vertebrates. Preparation and stabilization of all recovered fossils are essential in order to fully mitigate adverse impacts to the resources (Scott and others, 2004).

4. Identification and curation of specimens into an established, accredited museum repository with permanent retrievable paleontologic storage. These procedures are also essential steps in effective paleontologic mitigation (Scott and others, 2004) and CEQA compliance (Scott and Springer, 2003). The paleontologist should have a written repository agreement in hand prior to the initiation of mitigation activities. Mitigation of adverse impacts to significant paleontologic resources is not complete until such curation into an established museum repository has been fully completed and documented.

5. Preparation of a report of findings with an appended itemized inventory of specimens. The report and inventory, when submitted to the appropriate Lead Agency along with confirmation of the curation of recovered specimens into an established, accredited museum repository, would signify completion of the program to mitigate impacts to paleontologic resources.

RESULTS OF ANALYSIS OF ENVIRONMENTAL IMPACTS

Significant Impact Which Cannot be Avoided or Mitigated

(Section 15126(b) of CEQA Guidelines)

Not applicable; Impact on paleontological resources are considered significant but mitigable.

Significant Impact Which Can be Avoided or Mitigated

Development of the site may have an impact on paleontological resources that cannot be avoided. Impacts to these paleontological resources can however, be mitigated by implementation of all mitigation measures recommended above.

Cumulative Impacts

Impacts to paleontological resources at the site are considered to be non-Cumulative.

Residual Impacts After Mitigation (If Any)

There will be no Residual Impacts after Mitigation.

Alternatives Analysis

There is no need to consider alternatives to the project as impacts to the paleontological resources will be reduced to insignificant levels if mitigation measures are employed.

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APPENDIX J
TRAFFIC IMPACT STUDY REPORT

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TRAFFIC IMPACT STUDY REPORT

BLYTHE MESA SOLAR PROJECT

May 2013

KOA CORPORATION
PLANNING & ENGINEERING
www.koacorporation.com

TRAFFIC IMPACT STUDY REPORT

BLYTHE MESA SOLAR PROJECT

May 2013

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CHAPTER 1
INTRODUCTION

PROJECT DESCRIPTION

The proposed Blythe Mesa Solar Project (Project) consists of construction and operation of a 485 megawatt (MW) alternating current solar photovoltaic (PV) electrical generating facility and associated infrastructure to provide site access and connection to the statewide electricity transmission grid. The Project is proposed to be located on approximately 3,660 acres in the Palo Verde Mesa region of Riverside County—3,587 for the solar field and 73 acres for the 230 kilovolt (kV) transmission line interconnect. The power produced by the Project would be conveyed to the local power grid via interconnection to the Southern California Edison Colorado River Substation, an approved new substation located south of Highway 10 and approximately four miles west of the Project site. The Project has secured a California Independent System Operator (CAISO) interconnection queue position sufficient for the size of the Project. The Project would produce enough energy to power approximately 180,000 households and progress the goals of the California Renewable Portfolio Standard (RPS) and other similar renewable programs in the state.

The project regional location is shown in Figure 1-1. The Project study area is shown in Figure 1-2.

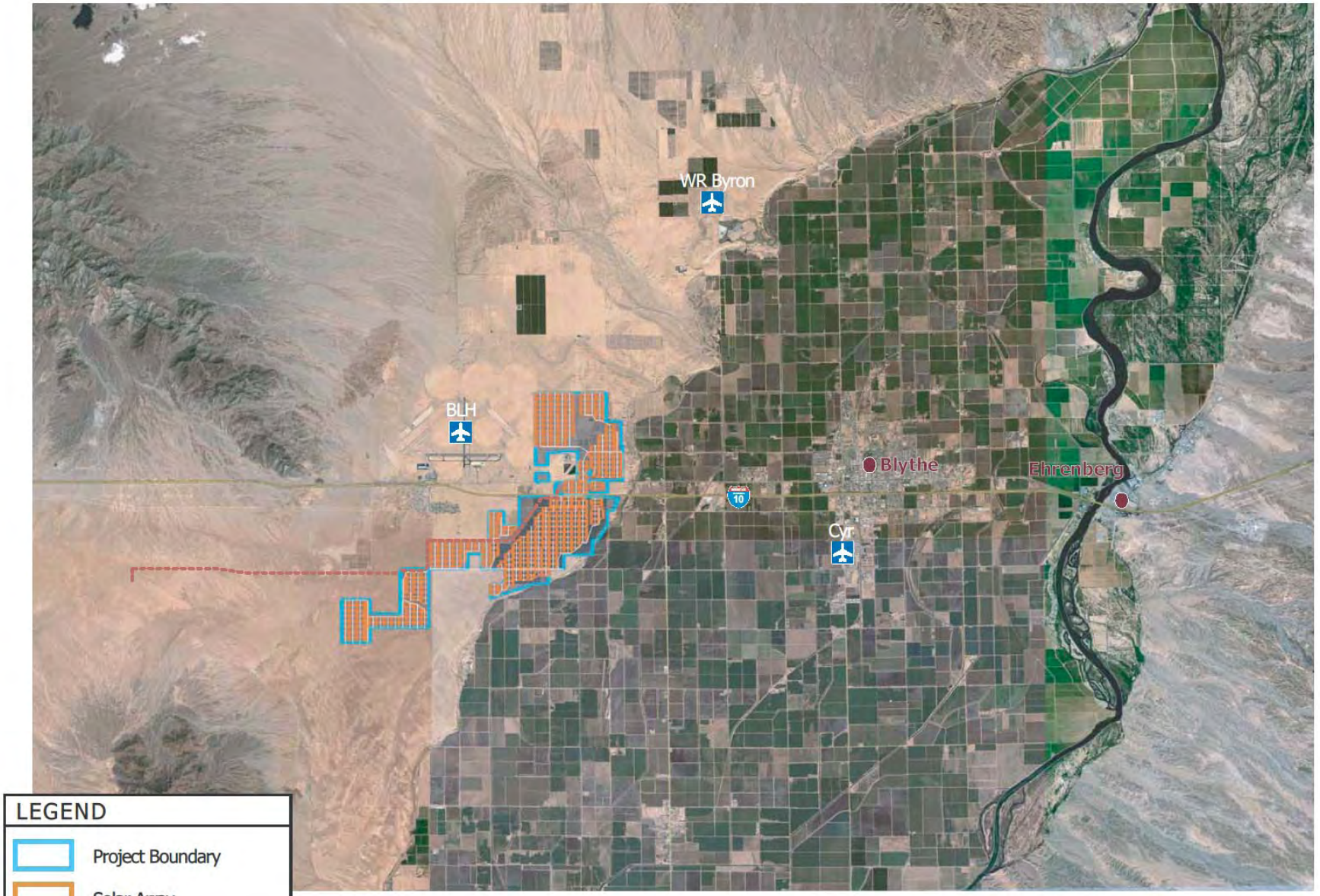
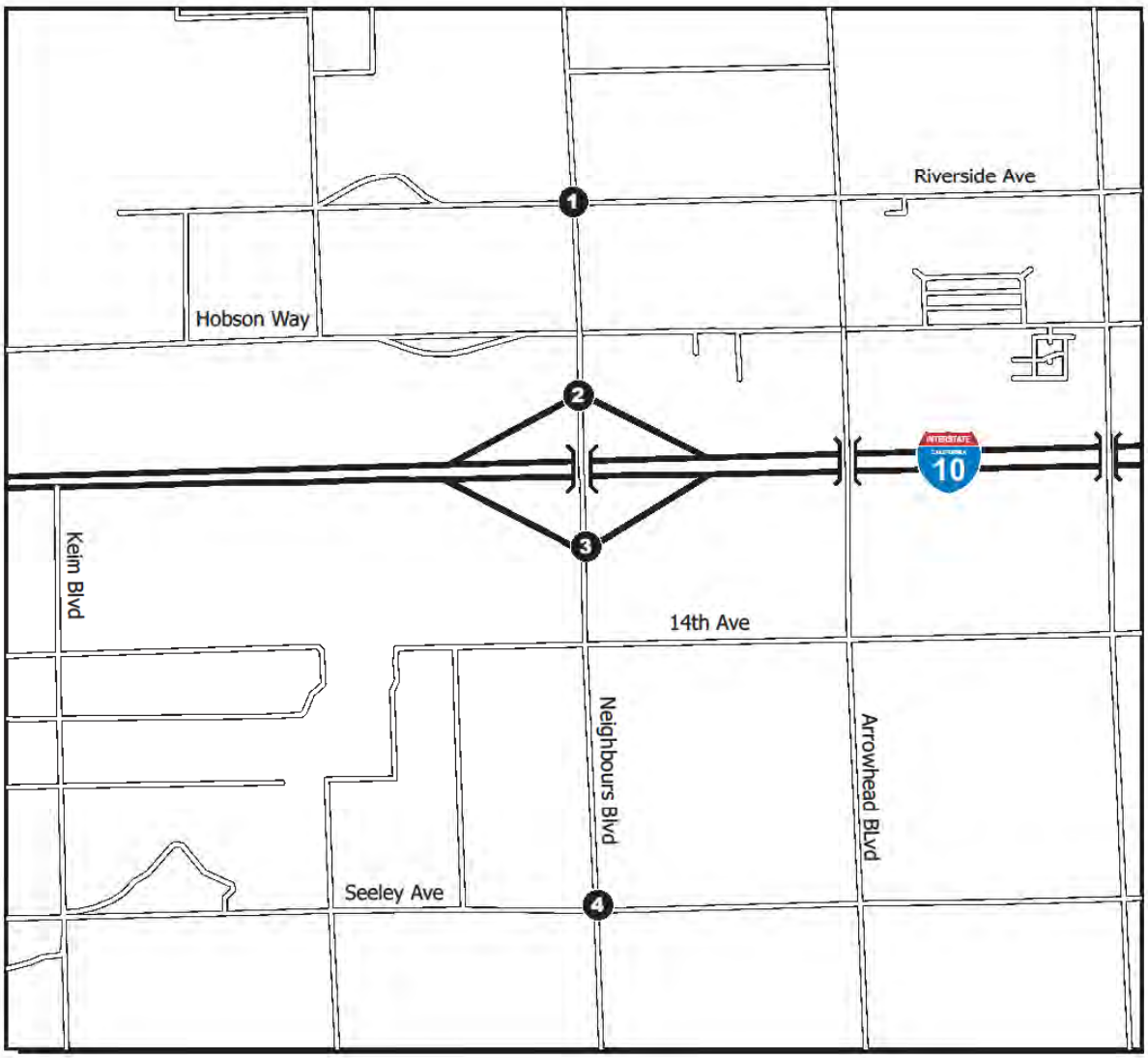


Figure 1-1
Project Regional Location



LEGEND

1 Study Intersection Locations

Figure 1.2
Project Study Area

N
Not To Scale

CHAPTER 2
METHODOLOGIES

This chapter documents the methodologies and assumptions used to conduct the traffic impact analysis for the Project. The study methodology and analysis was conducted in accordance with the County of Riverside guidelines. These guidelines are used to determine potential significant impacts of the Project. This section contains the following background information:

- Study scenarios
- Study area descriptions
- Analysis methodology

STUDY SCENARIOS

This report presents an analysis of the intersection operating conditions during the morning and evening peak hours for the following anticipated timeframes:

- Existing Conditions (2011)
- Future Conditions (2015)

STUDY AREA DESCRIPTION

A total of 4 intersections are potentially impacted by the access points identified and analyzed as they relate to the proposed substations and operation/maintenance facilities. Traffic data and other transportation system information were obtained from daily and peak-hour counts, site visits, maps, aerial photos, and communication with County staff. The study area consists of the following intersections:

- Neighbours Boulevard and Riverside Drive
- Neighbours Boulevard and I-10 Westbound Ramps
- Neighbours Boulevard and I-10 Eastbound Ramps
- Neighbours Boulevard and Seeley Avenue

ANALYSIS METHODOLOGY

This section presents a brief overview of traffic analysis methodologies and concepts used in this study. These methodologies are found in the *Highway Capacity Manual (HCM*). Level of service is a report-card scale used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service (LOS) ranges from Level of Service A (free flow, little congestion) to Level of Service F (forced flow, extreme congestion).

Level of Service Criteria

Level of service for signalized intersections is based upon the average time (seconds) that vehicles approaching an intersection are delayed. There is a specific delay and level of service associated with each approach and an overall average delay for all movements. The overall level of service for the intersection is based upon the overall average delay.

Unsignalized intersection level of service is also based upon the control delay, but delay is only assessed for those traffic movements that are stopped or must yield to through traffic. Some movements, including cross traffic on the minor street or left turns onto the major street, can be subject to long delays, however through traffic and right turns from the major street will not experience any delays at stopped intersections. When delay for cross traffic is severe (Level of Service F) the intersection should be evaluated further for possible improvement with traffic signals. In some cases, this analysis determines that the delay is being experienced by a very low number of vehicles and traffic signals are not warranted. In other cases, the number of stopped vehicles is substantial and traffic signals may be justified as a mitigation measure, additional analysis is required to determine the need and justification for the installation of a traffic signal.

Table 2-1 shows the relationship between level of service and the performance measures for signalized and unsignalized intersections and lists the HCM delay criteria for signalized intersections.

Table 2-1
Intersection Levels of Service Definitions

Level of Service	Signalized Intersection Control Delay (in sec/veh)	Unsignalized Intersection Control Delay (in sec/veh)
A	0 – 10	0 – 10
B	10.1 – 20	10.1 – 15
C	20.1 – 35	15.1 – 25
D	35.1 – 55	25.1 – 35
E	55.1 – 80	35.1 – 50
F	80.1 or more	50.1 or more

Source: Highway Capacity Manual 2000, Exhibits 16.2 and 17-2

The County of Riverside General Plan Policy C 2.1 has identified the following countywide target Levels of Service:

LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, and Expressways, conventional state highways or freeway ramp intersections.

LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walk-able communities.

Caltrans has identified a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.

The Riverside County Transportation Commission whom is in charge of the Riverside County Congestion Management Program has approved a minimum traffic LOS standard of "E." In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A.

For this analysis contained in this report, mitigation measures should be considered when traffic conditions are forecasted to decline below LOS “D”.

Significance Threshold

The following types of traffic impacts are considered to be "significant" under CEQA:

- When existing traffic conditions (Existing Traffic) exceed the General Plan target LOS.
- When project traffic, when added to existing traffic (Project Completion), will deteriorate the LOS to below the target LOS, and impacts cannot be mitigated through project conditions of approval.
- When cumulative traffic (Cumulative) exceeds the target LOS, and impacts cannot be mitigated through the TUMF (*Transportation Uniform Mitigation Fee)* network (or other funding mechanism), project conditions of approval, or other implementation mechanisms.

Intersection Capacity Analysis

The analysis of peak hour intersection conditions was conducted using the TRAFFIX software. The following peak hours were selected for analysis to coincide with normal weekday peak traffic periods:

- Weekday a.m. peak hour (between 7:00 and 9:00 a.m.)
- Weekday p.m. peak hour (between 4:00 and 6:00 p.m.)

All unsignalized intersections were analyzed based on the "operational analysis" procedure for signalized intersections, as defined in the 2000 Highway Capacity Manual (HCM). Local practice uses 1,900 passenger cars per hour of green per lane (pcphgpl) as the maximum saturation flow of a single lane at an intersection for existing and future scenarios. This saturation flow rate is adjusted to account for lane width, on-street parking, conflicting pedestrian flow, traffic composition, (i.e., percent of trucks) and shared lane movements (e.g., through and right-turn movements from the same lane). Level of service for signalized intersections is based on the average time (seconds) that vehicles entering an intersection are delayed. Table 2-1 lists the HCM delay criteria for signalized intersections. Occasionally an intersection will exhibit an overflow condition when the average arrival rate of cars exceeds capacity, which results oversaturation of the intersection. This can occur when an area experiences a high increase of traffic demand and cannot handle all the traffic causing excessive delay for movements. When the intersection is oversaturated, the system is in a non-equilibrium state, and the queue length increases constantly. This is assuming a constant arrival rate and capacity.

In addition, a peak hour factor was added to all of the volumes, to analyze the peak hour. Traffic volumes may fluctuate from minute to minute within the peak periods, so a peak hour factor increases the hourly volume, to simulate the higher 15 minute peak period for the entire peak period. The existing peak hour factor (ranging from 0.0 to 1.0) was obtained from existing traffic count information and applied to all intersections for the existing and future scenarios.

Regulatory Framework

Traffic study details are defined by guidelines and requirements published by the federal, state, and local reviewing agencies. Typical traffic studies are based on specific proposed project locations that would generate a specific number of trips to and from a site within a defined time period.

In addition, construction and operating plans will need to be developed in accordance with federal, state, and local regulations and standards that promote safety and efficient use of public roadways.

Federal

The Code of Federal Regulations (CFR) provides guidelines for regulations as it relates to the movement of hazardous materials via the Federal Motor Carrier Safety Administration. Under the

Federal Aviation Administration guidelines, regulations are provided for aviation activities during the construction and post-construction periods.

State

The California Vehicle Code (CVC) along with the California Streets and Highway Code outline regulations as pertains to the transportation of hazardous waste within the state.

Local

Separate traffic study guidelines are published by County of Riverside (via the Transportation Department).

Encroachment permits may be required by local jurisdictions that lie within the project study area for the construction activities associated with the project. These jurisdictions include but limited to Bureau of Land Management (BLM), Caltrans, County of Riverside, and City of Blythe.

Table 2-2 provides specific codes and a general description of adopted federal, state, and local laws, ordinances, regulations and standards (LORS) pertaining to general traffic and transportation safety and operational issues that would relate to construction and operations of the proposed project.

Table 2-2A
Traffic and Transportation Laws, Ordinances, Regulations, and Standards

Applicable Law	Description
Federal	
Objects Affecting the Navigable Air Space: Title 14 CFR Part 77	Describes the criteria used to determine the need for an FAA "Notice of Proposed Construction or Alteration" in cases of potential obstruction hazards and requires applicant to submit form for construction near airport.
CFR Title 14 Aeronautics and Space, Part 77 Objects Affecting Navigable Airspace (14 CFT 77)	This regulation establishes standards for determining physical obstructions to navigable airspace; sets noticing and hearing requirements; and provides for aeronautical studies to determine the effect of physical obstructions to the safe and efficient use of airspace
Proposed Construction and/or Alteration of Objects that May Affect the Navigable Air Space: FAA Advisory Circular No. 70/7460-2K	Describes FAA Standards for marking and lighting of obstructions identified by Title 14 CFR Part 77.
CRR Title 47 Section 15.2524	Prohibits operation of devices that can interfere with radio-frequency communication.
CFR, Title 49, Subtitle B	Includes procedures and regulations pertaining to interstate and intrastate transport (including hazardous materials program procedures) and provides safety measures for motor carriers and motor vehicles that operate on public highways.
State	
CVC Section 353	Defines hazardous materials
CVC Sections 2500-2505	Authorizes the issuance of licenses for the transport of hazardous materials
CVC, Div 2, Chapter 2.5; Div 6; Chap. 7; Div 13; Chap. 5; Div. 14.1; Chap 1 & 2; Div. 14.8; Div. 15	Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways; safe operation of vehicles; and the transportation of hazardous materials
California Streets and Highway Code, Div 1, Chap 3; Div 2 Chap 5.5	Includes regulations for the care and protection of state and county highways and provisions for the issuance of written permits
CVC Sections 13369, 15275 and 15278	Address the licensing of drivers and the classification of licenses required for the operation of particular types of vehicles; also require certificates permitting operation of vehicles transporting hazardous materials.
CVC Sections 31303-31309	Regulates the highway transport of hazardous materials, the routes used, and restrictions on those facilities.
CVC Sections 35780	Requires permits for any load exceeding Caltrans weight, length, or width standards for public roadways.
CVC Sections 31600-31620	Regulate the transportation of explosive materials.
CVC Sections 32100-32109	Establish special requirements for the transportation of inhalation hazards and poisonous gases.

Table 2-2B
Traffic and Transportation Laws, Ordinances, Regulations, and Standards

Applicable Law	Description
State – *continued*	
CVC Sections 32000-32053	Regulates the licensing of carriers of hazardous materials including noticing requirements.
CVC Sections 34000-34121	Establish special requirements for the transportation of flammable and combustible liquids over public roads and highways.
CVC Section 34500 et seq.	Regulate the safe operation of vehicles, including those that are used for the transportation of hazardous materials.
California Health and Safety Code Section 25160 et seq.	Requires that an authorized representative of the generator or facility operator that is responsible for loading hazardous waste into a transport vehicle shall, prior to loading, ensure that the driver of the transport vehicle is in possession of the appropriate class of driver's license and any endorsements required to operate the transport vehicle with the intended load.
California Streets and Highways Code Sections 117, 660-695, and 700-711	Regulates right-of-way (ROW) encroachment and the granting of permits for encroachments on State Highways and freeways.
California Streets and Highways Code Sections 1450, 1460 et seq., and 1480 et seq.	Regulates ROW encroachment and the granting of permits for encroachments on county roads.
California Government Code Sections 65352, 65940, and 65944	Requires evaluation of compatibility with military activities for any land use proposal located near a military installation or airspace.
Local	
Riverside County General Plan Circulation Element and Palo Verde Valley Area Plan	Specifies long-term planning goals and procedures for transportation infrastructure system quality; standards and procedures for air transportation; and transportation safety in Riverside County
Riverside County General Plan Circulation Element	System Design, Construction, and Maintenance portion specifies standards for new road construction and future extensions of existing streets.
Riverside County General Plan Circulation Element	Level of Service (LOS) standards are used to assess the performance of a street or highway system and the capacity of a roadway.
Riverside County Municipal Code Title 10, Chapter 10.08, Sections 10.08.010 – 10.08.180	Establishes requirements and permits for oversize and overweight vehicles.
Riverside County Ordinance No. 460	All work shall conform to the requirements of the Riverside County Transportation Department Subdivision Regulations
Riverside County Ordinance No. 461	All work shall conform to the requirements of the Riverside County Transportation Department Road Improvement Standards and Specifications
City of Blythe General Plan Circulation Element	Sets City street design criteria consistent with the Palo Verde Valley Area Plan of the County of Riverside General Plan.
City of Blythe Municipal Code, Title 10, Article 19, Section 19.1	Establishes permit requirements for moving heavy loads or equipment on city streets.

TRIP GENERATION

Project Trip Generation Development Process

Construction of the project would result in a temporary increase in traffic volumes on the regional and local roadways due to construction related activities. Traffic that would be generated by construction worker commuter trips and deliveries would temporarily increase the existing traffic volumes in the study area. Project construction is expected to take place over approximately 36 months with 24 months of peak construction period.

For the purposes of estimating the project's trip generation, additional assumptions were considered. These assumptions were coordinated with the applicant in an effort to provide the expected number of trips generated by the construction of this project. The AM project peak hour is expected to occur with the arrival of construction personnel to the job sites at or before 7:00AM. This does not coincide with the AM peak hour of the adjacent street system, which generally occurs between 7:00 AM and 9:00 AM. The PM project peak hour is expected to occur with the departure of all personnel between the hours of 4:00 PM and 6:00PM.

During the AM peak hour of adjacent street traffic, the project is also expected to generate trips related to the delivery of supplies. The delivery of supplies will be transported via multi-axle trucks to the project site randomly over a 10-hour workday period. Riverside County has not established PCE standards; therefore, at the request of the Riverside County staff, PCE conversion factors from the San Bernardino Associated Governments (SANBAG) Congestion Management Plan (CMP) were used. The traffic impacts of multi-axle trucks at street intersections are normally addressed by converting heavy vehicles into "passenger car equivalents" (PCEs). For the purposes of this study, it is assumed that all multi-axle truck traffic is best represented by PCE factors of 1.5, 2.0, and 3.0 depending on the number of axles associated with delivery truck.

PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by project traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the routes along which the project traffic will distribute. For the purpose of developing project trip distribution patterns, construction crews would be drawn from the Blythe/Palo Verde Valley region and the Desert Center region, with a smaller portion drawn from the Imperial Valley or Eastern Riverside County region. Anticipated average daily material deliveries would consist of about 20 truck deliveries per day for the peak 24 month period. Workers and delivery trucks will access the site using Neighbours Boulevard ramps off Interstate 10 (I-10).

Project Access

Access to the project construction sites will be provided via the following:

- Neighbours Boulevard freeway ramps off Interstate I-10;
- Riverside Drive; and
- Seeley Avenue.

CHAPTER 3
EXISTING TRAFFIC CONDITIONS (2011)

TRAFFIC VOLUMES

Existing Circulation Network

The local roadway facilities in the vicinity of the project area include Neighbours Boulevard, Riverside Drive and Seeley Avenue.

Neighbours Boulevard is a two-lane roadway running on a north/south alignment connecting to I-10 via an existing interchange. It provides one travel lane per direction and is divided by a double yellow center line. Land uses along this roadway in the project vicinity are mostly residential uses with vacant lots and some commercial, farming land and industrial land uses.

Riverside Drive is a two-lane roadway running on an east/west alignment connecting to Neighbours Boulevard. It provides one travel lane per direction with no centerline delineation. Land uses along this roadway in the project vicinity are mostly residential uses with vacant lots and some farming land and industrial land uses.

Seeley Avenue is a two-lane roadway running on an east/west alignment connecting to Neighbours Boulevard. It provides one travel lane per direction with no centerline delineation. Land uses along this roadway in the project vicinity are mostly residential uses with vacant lots and some farming land and industrial land uses.

Regional Roadway Facilities

Interstate 10 **(I-10)** is the nearest freeway to the project site. It provides regional east/west throughout the State, beginning in Los Angeles and continuing west past the California state border to Arizona and beyond. In the project area, it has two lanes per direction. Neighbours Boulevard provides a full interchange with this freeway.

Intersection turning movement classification counts were performed during the weekday morning peak period from 7:00 AM to 9:00 AM and during the weekday evening peak period from 4:00 PM to 6:00 PM in September 2011. Intersection classification counts provide vehicle classification (cars, pickups, buses, trucks, etc) data in addition to the individual vehicle movements. Due to the nature of this project PCE (passenger car equivalent) factors were used in order to accurately evaluate the impact that a mode of transport has on traffic variables (such as headway, speed, density) compared to a single car. The traffic impacts of heavy trucks at intersections are normally addressed by converting heavy vehicles into “passenger car equivalents’ (PCE’s). Studies have indicated that each truck has a similar traffic impact that ranges between 1.5 to 3 passenger vehicles at intersections. Riverside County has not established PCE standards; therefore, at the request of the Riverside County staff, PCE conversion factors from the San Bernardino Associated Governments (SANBAG) Congestion Management Plan (CMP) were used. A PCE factor of 3.0 for 4-axle trucks, 2.0 for 3 -axle trucks, and 1.5 for 2-axle trucks were applied to classification counts. Existing peak-hour volume counts with PCE adjustments are included in **Appendix A**.

Intersections

As shown in Table 3-1, all intersections within the study area of the proposed project are operating at an acceptable level of service. Figures 3-2 and 3-3 illustrate the existing peak hour traffic volumes during the AM and PM peak hours. For both AM and PM peak hours, most of the traffic originates from the south towards the ramps and Hobson Way with a very limited amount of traffic heading towards Riverside Avenue. Most of this traffic can be attributed to the heavy agriculture activities located south of Interstate 10 heading to and from the City of Blythe. The higher volumes heading northbound and southbound from Seeley Avenue cause a higher delay at the intersection however; all of the intersections still operate at a LOS of A. Figure 3-1 shows the existing intersection geometries.

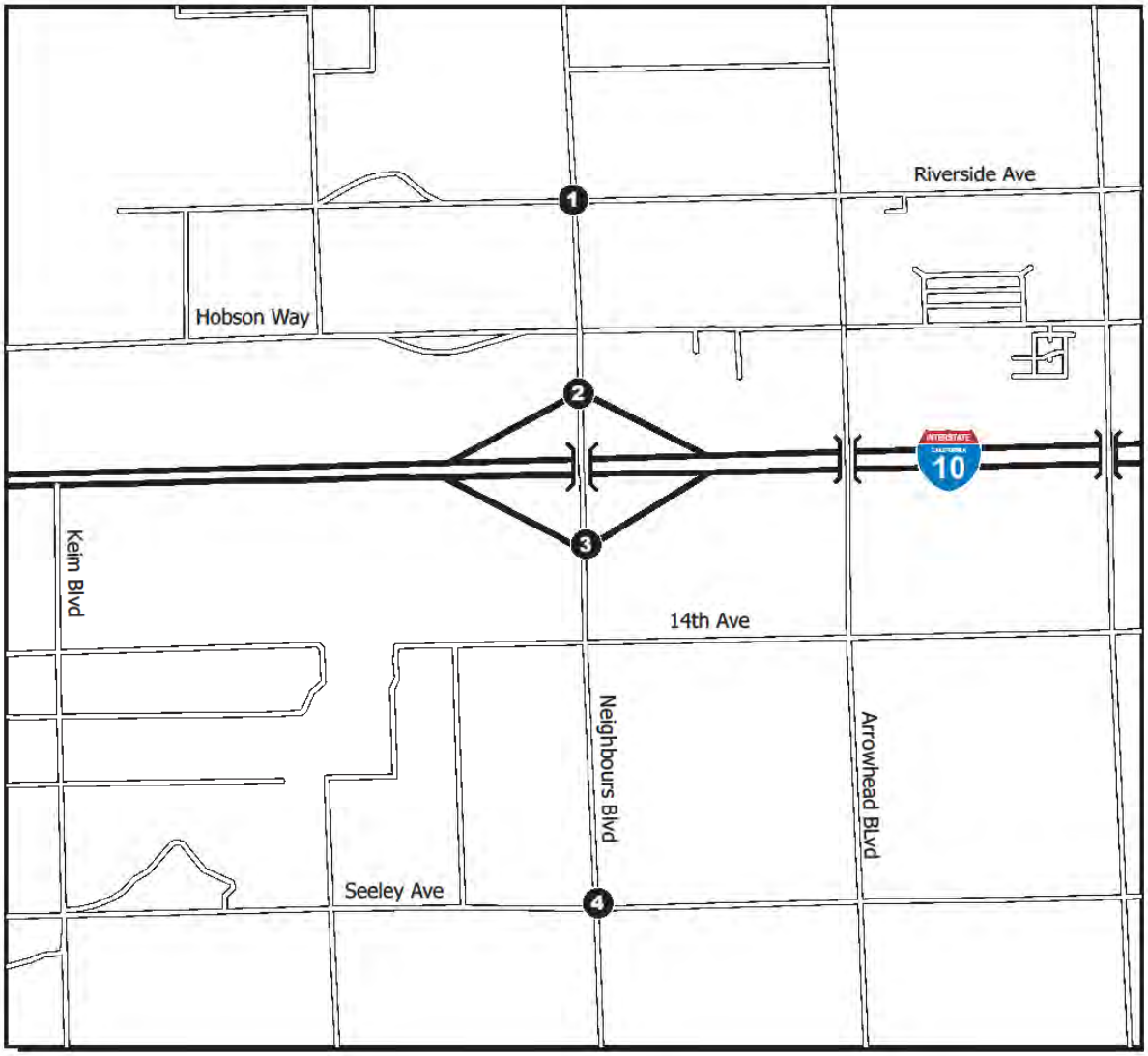
Appendix B contains the analysis worksheets for existing intersection conditions.

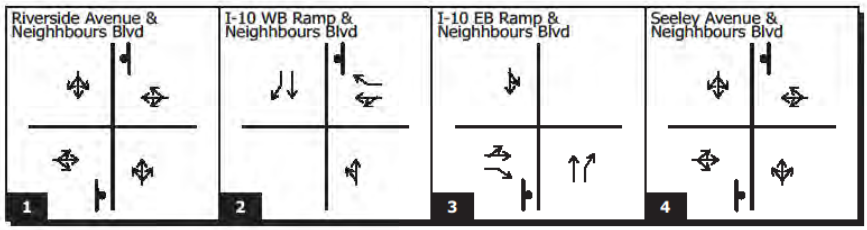
Table 3-1
Existing Intersection Conditions

Intersection	Without Project	
	Delay (sec/veh)	LOS
AM Peak Hour		
1. Riverside Dr & Neighbours Blvd*	9.0	A
2. I-10 WB Ramp & Neighbours Blvd*	9.0	A
3. I-10 EB Ramp & Neighbours Blvd*	9.2	A
4. Seeley Ave & Neighbours Blvd*	9.4	A
PM Peak Hour		
1. Riverside Dr & Neighbours Blvd*	8.6	A
2. I-10 WB Ramp & Neighbours Blvd*	9.5	A
3. I-10 EB Ramp & Neighbours Blvd*	9.5	A
4. Seeley Ave & Neighbours Blvd*	9.8	A

Note: *Unsignalized Intersection

Based on the existing conditions analysis, all intersections are operating at LOS A which represents a free-flow operation. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.

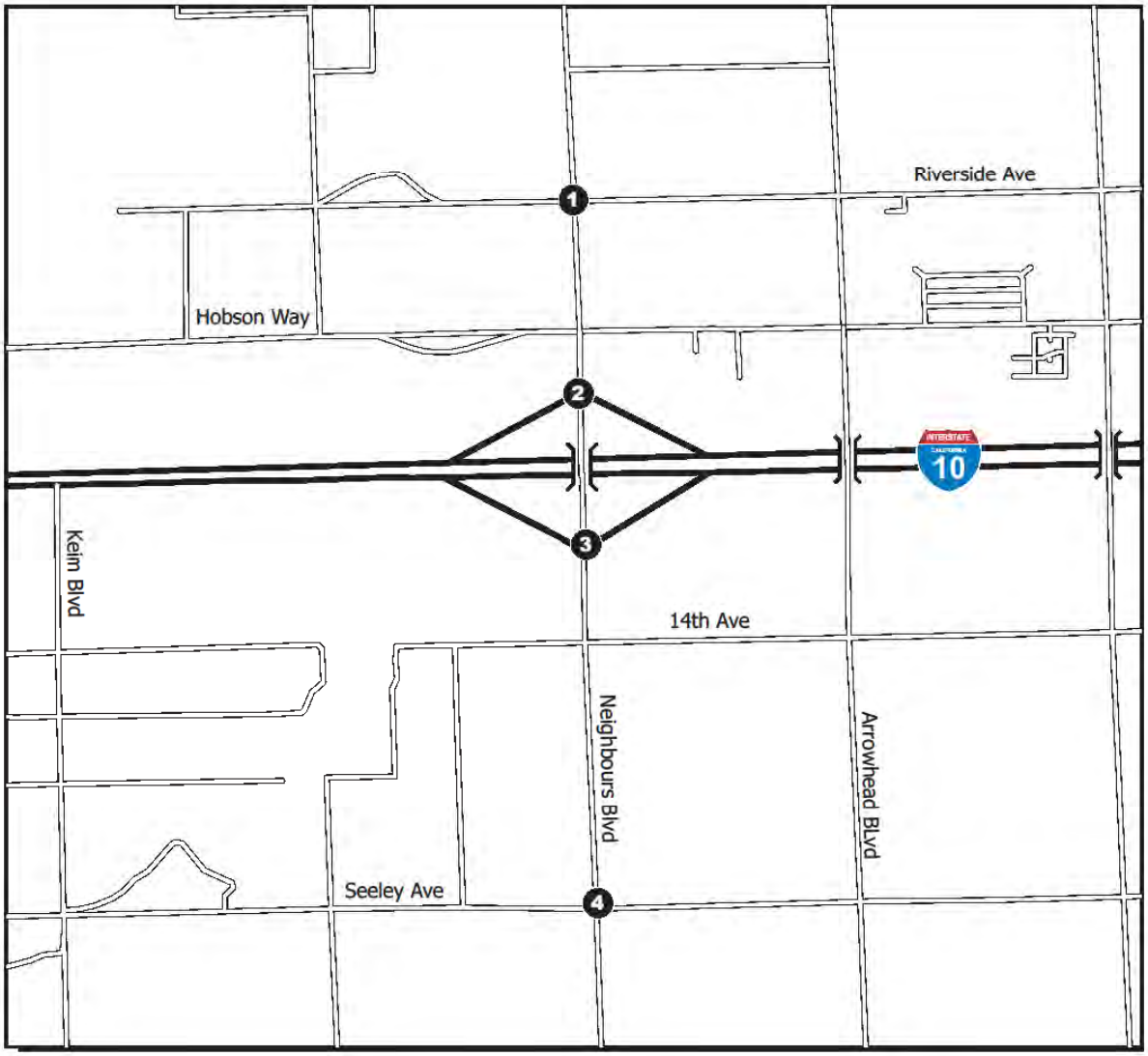


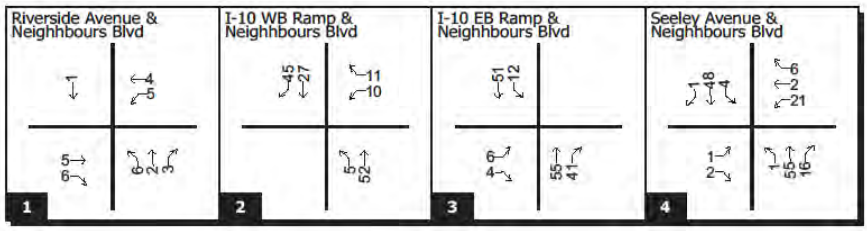


LEGEND	
	Geomteric Configuration
	Stop Sign

Figure 3.1
Existing Geometries

N
Not To Scale



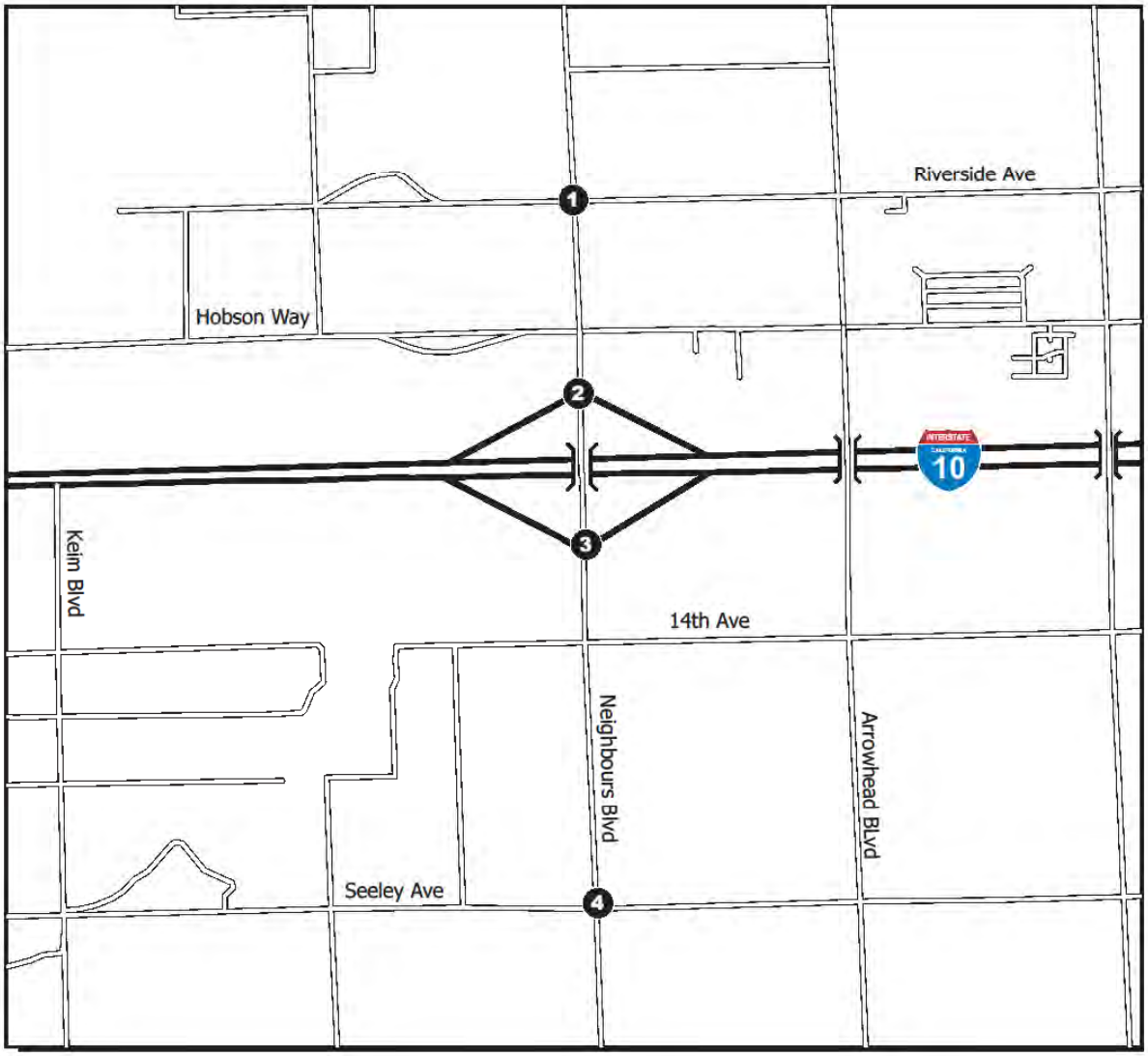


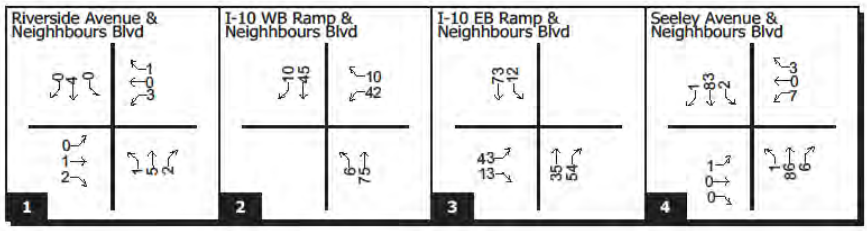
LEGEND

10 AM Peak Hour Traffic

Figure 3.2
Existing Traffic Volumes - AM Peak Hour

N
Not To Scale





LEGEND

10 PM Peak Hour Traffic

Figure 3.3
Existing Traffic Volumes - PM Peak Hour

N
Not To Scale

Pedestrian

Pedestrian facilities currently do not exist throughout the proposed Blythe Mesa Solar Project study area. The existing pedestrian network does not currently provide sidewalk connecting adjoining land uses along Neighbours Boulevard, Riverside Drive and Seeley Avenue.

Transit and Rail

Bus Service

Bus service is offered by the Palo Verde Valley Transit Agency (PVVTA) along Neighbours Boulevard north and south of I-10. Routes 3, 4, and 5 travel along Hobson Way which pass through the project location and heads west towards Mesa Verde. There is a stop located adjacent to the project at the intersection of Hobson Way and Buck Boulevard. Routes 3 and 5 run along Neighbours Boulevard towards Ripley with stops on the corner of Hobson Way and 14th Avenue along Neighbours Boulevard, The project will not directly affect the ability of transit to use any of their existing routes or stops. In the event that an existing bus stop is temporarily affected by construction within an existing street right of way that has transit service, the contractor shall coordinate with PVVTA to temporarily relocate the affected transit stop location. Otherwise, the service would not be affected since road closures and detours are not a feature of any of the studied access points.

Rail Service

Blythe is served in rail by the Arizona and California Railroad but currently suspends service in the Blythe branch due to the quality of the tracks.

Airport Service

Blythe Airport (BLH) is a public airport located six miles west of Blythe and 2 miles west of the project, serving Riverside County. The airport has two runways and is mostly used for general aviation. W R Byron Airport is a private airport located within city limits, approximately 4 miles northwest of central Blythe and 4.5 miles northeast of the project. Cyr Airport is a private airport with two runways that is located 2 miles south from the center of Blythe and 5 miles east of the project site. See Figure 1.1 for the locations of the airports.

Bicycle

No bicycle facilities currently exist in the proposed Blythe Mesa Solar Project study area. The existing transportation network does not currently provide bike lanes connecting adjoining land uses along Neighbours Boulevard, Riverside Drive and Seeley Avenue.

Parking

Construction workers will park personal vehicles on site where adequate parking space will be provided. The anticipated construction activities will not temporarily eliminate any existing parking spaces that would result in parking deficiencies. Heavy equipment will be parked and maintained at construction sites and all utility trucks will park in the construction yards. Therefore, there would be no impact on the public parking inventory associated with the construction of the project since sufficient parking for all employees, visitors, service vehicles, and contractors will be provided and occur on-site during the construction of the project.

School

It is understood that the potential impacts of traffic, namely construction truck traffic, may have some effect on school children in the area (children being picked up or dropped off on local roads near the proposed project site). Blythe area public elementary and secondary schools comprise the Palo Verde Unified School District, which contains 3 elementary schools, 1 middle school, 1 high school, and continuation/adult education school. Palo Verde Community College District is part of the California Community College system and includes Palo Verde Community College, a campus in Blythe, a center in Needles and an extension for Adult Basic education and non-credit classes located on Spring Street in downtown Blythe.

The following table indicates schools, their locations, bus routes, and distance from the project site.

Table 3-2
School Bus Characteristics in the Project Vicinity

School Name	Distance From Project Site	Bus Routes
Palo Verde College	2.5 miles north of the project site	Palo Verde Valley Transit Route 2
Palo Verde Unified School District		
Palo Verde High School	3.75 miles east of the project site	PVUSD Bus Routes A,B,C,D,E,F,G,H,I,J,L,M
Blythe Middle School	3.75 miles east of the project site	PVUSD Bus Routes A,B,C,D,E,F,G,H,I,J,L,M
Twin Palms Continuation School	3.75 miles east of the project site	PVUSD Bus Routes E,
Margaret White Elementary School	4.25 miles east of the project site	PVUSD Bus Routes C,F,G
Felix J. Appleby Elementary School	4.5 miles east of the project site	PVUSD Bus Routes A,B,C,D,J
Ruth Brown Elementary School	4.75 miles east of the project site	PVUSD Bus Routes C,E,F,H,J,L

CHAPTER 4
THE PROJECT

Once construction of the project is completed, the project would require 12 permanent full-time employees for operation, which would not generate a significant number of trips above those already generated by the exiting project site. However, the construction phase of the project will include trips generated by construction workers and supplies delivered by trucks to the project site. As such, this traffic analysis focuses on the traffic impacts that could occur during construction of the solar project.

This section focuses on the characteristics of the construction of proposed project.

Project Description

The proposed Blythe Mesa Solar Project (Project) consists of construction and operation of a 485 megawatt (MW) alternating current solar photovoltaic (PV) electrical generating facility and associated infrastructure to provide site access and connection to the statewide electricity transmission grid. The Project is proposed to be located on approximately 3,660 acres in the Palo Verde Mesa region of Riverside County—3,587 for the solar field and 73 acres for the 230 kilovolt (kV) transmission line interconnect. The power produced by the Project would be conveyed to the local power grid via interconnection to the Southern California Edison Colorado River Substation, an approved new substation located south of Highway 10 and approximately four miles west of the Project site. The Project has secured a California Independent System Operator (CAISO) interconnection queue position sufficient for the size of the Project. The Project would produce enough energy to power approximately 180,000 households and progress the goals of the California Renewable Portfolio Standard (RPS) and other similar renewable programs in the state

Project Construction Trip Generation Forecast

The project is expected to generate a maximum of 20 truck deliveries per day for the 24 month peak construction period. Transport truck deliveries include material and equipment deliveries. The calculations below account for heavier vehicles types (trucks) by converting truck trips to “passenger car equivalents”. SANBAG CMP passenger car equivalents (PCEs) per truck trip were implemented in this analysis. Passenger car equivalents (PCEs) are used in roadway capacity analysis to convert a mixed vehicle flow into an equivalent passenger car flow. This calculation is relevant to capacity and level of service determination, lane requirements, and determining the effect of traffic on roadway operations.

In addition, based on information obtained from the project proponent, the project site will employ a workforce of approximately 300-500 workers. Construction of the project will take approximately 36 months with 24 months of peak construction period. The project will require an average construction workforce of 40 workers at the beginning of construction and a peak of 500 workers during the 24 month peak construction period of the solar array, substations, operation and maintenance buildings and the installation of 230 kV transmission line and fiber optic cable with a tapering of fewer employees thereafter. The workforce vehicle trips associated with construction were calculated based upon these assumptions. It is anticipated that most workers would be drawn from the Blythe/Palo Verde Valley region and the Desert Center region, with a smaller portion drawn from the Imperial Valley or Eastern Riverside County region.

Construction of the project will require the use and installation of heavy equipment and associated systems. Heavy equipment will be delivered via truck, using Neighbours Boulevard from I-10 to the north and south utilizing Riverside Drive and Seeley Avenue. Anticipated average daily material deliveries would consist of about 20 truck deliveries per day for the peak 24 month construction period.

Peak Hour Trip Generation Forecast

For purposes of forecasting future peak hour trip generation, it is assumed that the majority of the daily project trips will occur during daylight hours. It is assumed that each employee arrives during the AM peak hour and departs during the PM peak hour and that some miscellaneous trips occur during this time. It is also assumed that truck trips will occur randomly over a 10-hour workday. Based on these assumptions, a daily and peak hour trip generation calculation is provided below.

Employee Trips

It is estimated that 500 employees will work on the site during the peak construction period. To evaluate a worst-case scenario, it is assumed that 300 employees arrive alone and 200 employees will carpool. In addition it is assumed that approximately 42 employees go to lunch or run some other errand during the day creating additional daily trips.

- 300 employees will drive alone = 300 inbound trips in the AM and 300 outbound trips in the PM
- 200 employees carpool (assumed 2 in a carpool) = 100 inbound trips in the AM and 100 outbound trips in the PM
- 42 employees go to lunch/run errands = 42 additional inbound and 42 additional outbound trips during the day

AM Peak Hour: 400 inbound employee trips

PM Peak Hour: 400 outbound employee trips

Total daily employee trips = (400*2) + (42*2) = 884 daily employee trips

On-site work hours would be from 7:00 a.m. to 7:00 p.m. During the installation period, construction workers are projected to be onsite five days per week, year round. Due to weather or other major type delays, times may shift to start as early as 5:00 a.m. and end as late as 8:00 p.m., as well as continue into the weekends. The construction PM peak hour for the project would be expected to occur with the departure of personnel at, 7:00PM. This does not coincide with the PM peak hour of the adjacent street, which occurs between 4PM and 6PM; however to be conservative, the project PM peak hour trip generation will be analyzed during the PM peak hour of the adjacent street traffic.

Additionally, trips generated from normal construction activities including activities of supervisors, activities of construction representatives, and delivery of supplies and equipment will also be analyzed during the PM peak hour of the adjacent street traffic.

Truck Trips

For the purposes of forecasting, it is assumed that 20 trucks per day will arrive and depart the site per day to deliver materials and equipment. This mix of fleet was provided by Power Engineers based on their experience with similar construction projects. Riverside County has not established PCE standards; therefore, at the request of the Riverside County staff, PCE conversion factors from the San Bernardino Associated Governments (SANBAG) Congestion Management Plan (CMP) were used. These trips will likely occur randomly during the day, assuming a 10-hour day.

- 40 daily two-way truck trips

Mix of fleet

Light Duty Truck: 18% (7 trucks)

Medium Duty Truck: 18% (7 trucks)

Heavy Duty Truck: 64% (26 trucks)

PCE Factors

Light Duty Truck (1.5 PCE): 11 trucks

Medium Duty Truck (2.0 PCE): 14 trucks

Heavy Duty Truck (3.0 PCE): 78 trucks

- 103 PCE truck trips / 10-hour day = 11 PCE truck trips during the AM peak hour and 11 PCE truck trips during the PM peak hour.

AM Peak Hour: 6 inbound and 5 outbound truck PCE trips

PM Peak Hour: 6 inbound and 5 outbound truck PCE trips

Additional Work Related Trips

For the purposes of forecasting, it is assumed that other trips associated with the activities of supervisors, inspectors and vendors would be equal to 20% of the employee trips and would occur randomly over a 10-hour work day.

- 884 daily employee trips x 0.20 = 177 ancillary daily trips
- 177 ancillary trips daily trips / 10-hour day = 18 trips during the AM peak hour and 18 during the PM peak hour.

AM Peak Hour: 9 inbound and 9 outbound ancillary trips

PM Peak Hour: 9 inbound and 9 outbound ancillary trips

Table 4-1 shows the traffic generation expected from the project based on the information provided by Power Engineers.

Table 4-1
Project Construction Traffic Generation Forecast

Type of Trips	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Employee Trips*	884	400	400	0	400	0	400
Truck Trips	103	11	6	5	11	6	5
Ancillary Trips	177	18	9	9	18	9	9
NET Project Trips (PCEs)	**1,164**	**429**	**415**	**14**	**429**	**15**	**414**

Note: PM Peak Hour does not coincide with the departure time of employees but to be conservative was assumed in the analysis

PCE: Passenger Car Equivalent

The project will generate a total of 1,164 trips daily, including 429 trips during the AM peak hour and 429 trips during the PM peak hour.

Project Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by project traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the route where the project traffic will distribute.

The workforce vehicle trips associated with construction were calculated based upon these assumptions. It is anticipated that most workers would be drawn from the Blythe/Palo Verde Valley region and the Desert Center region, with a smaller portion drawn from the Imperial Valley or Eastern Riverside County region. Construction of the project will require the use and installation of heavy equipment and associated systems. Heavy equipment will be delivered via truck, using Neighbours Boulevard from I-10 to the north and south utilizing Riverside Drive and Seeley Avenue. The project location is presented on Figure 4-1.

Figures 4-2a and 4-2b indicate the anticipated distribution for the truck deliveries and employee draw. The regional traffic distribution is anticipated to include 70% of the truck traffic approaching Neighbors Boulevard and I-10 interchange from the west and 30% approaching from the east. The regional approach for the construction workers is anticipated to include 30% approaching from the west and 70% approaching from the east. The local traffic distribution anticipates 60% of the traffic using Seeley Avenue access point and 40% using Riverside Avenue access point. Figures 4-3 and 4-4 illustrate the (truck and employee) project-related construction traffic volumes expected at locations within the study area, including use of local access routes. These figures indicate the proportion of project traffic which will use the street segments and turning movements indicated.

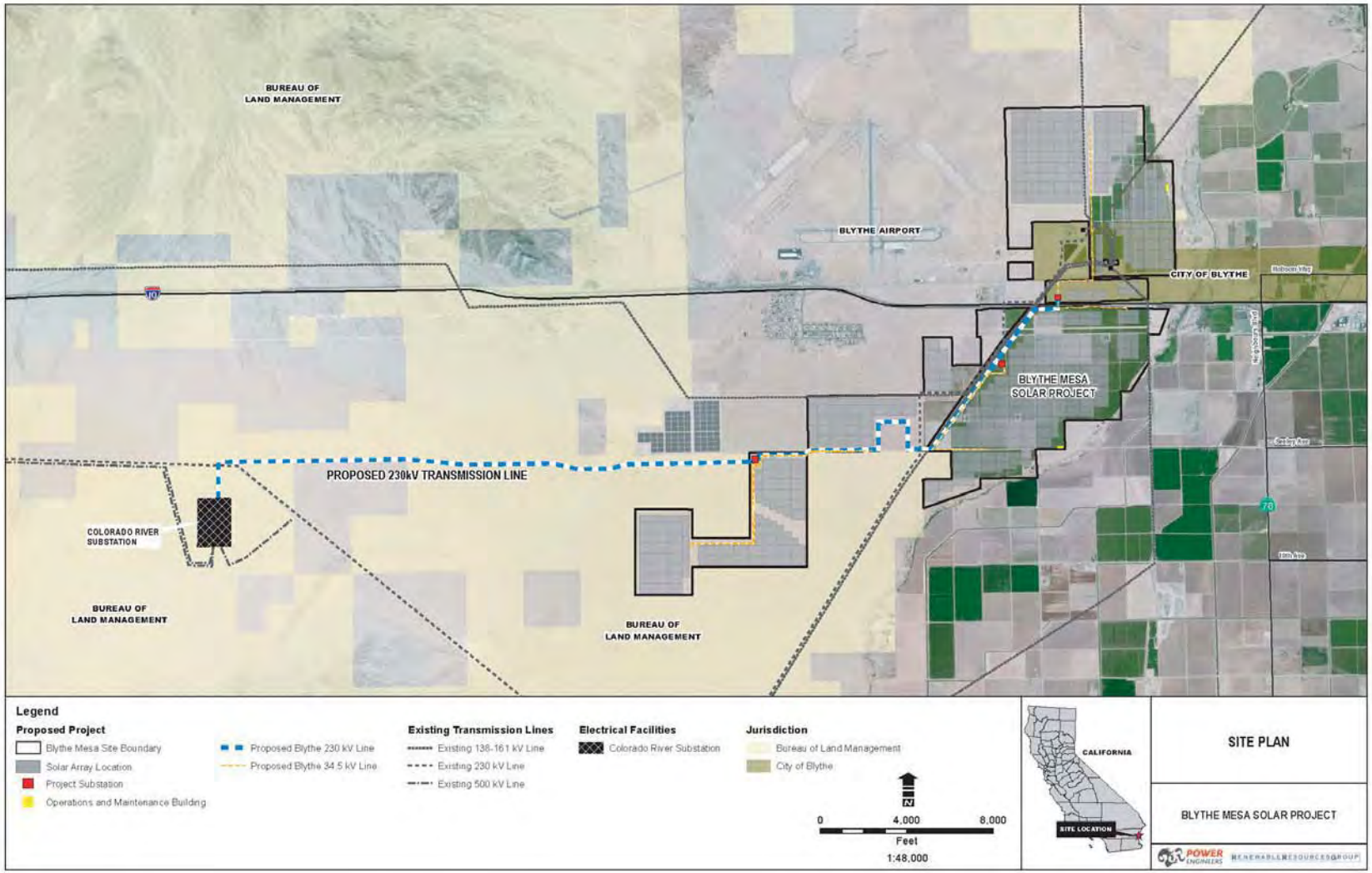
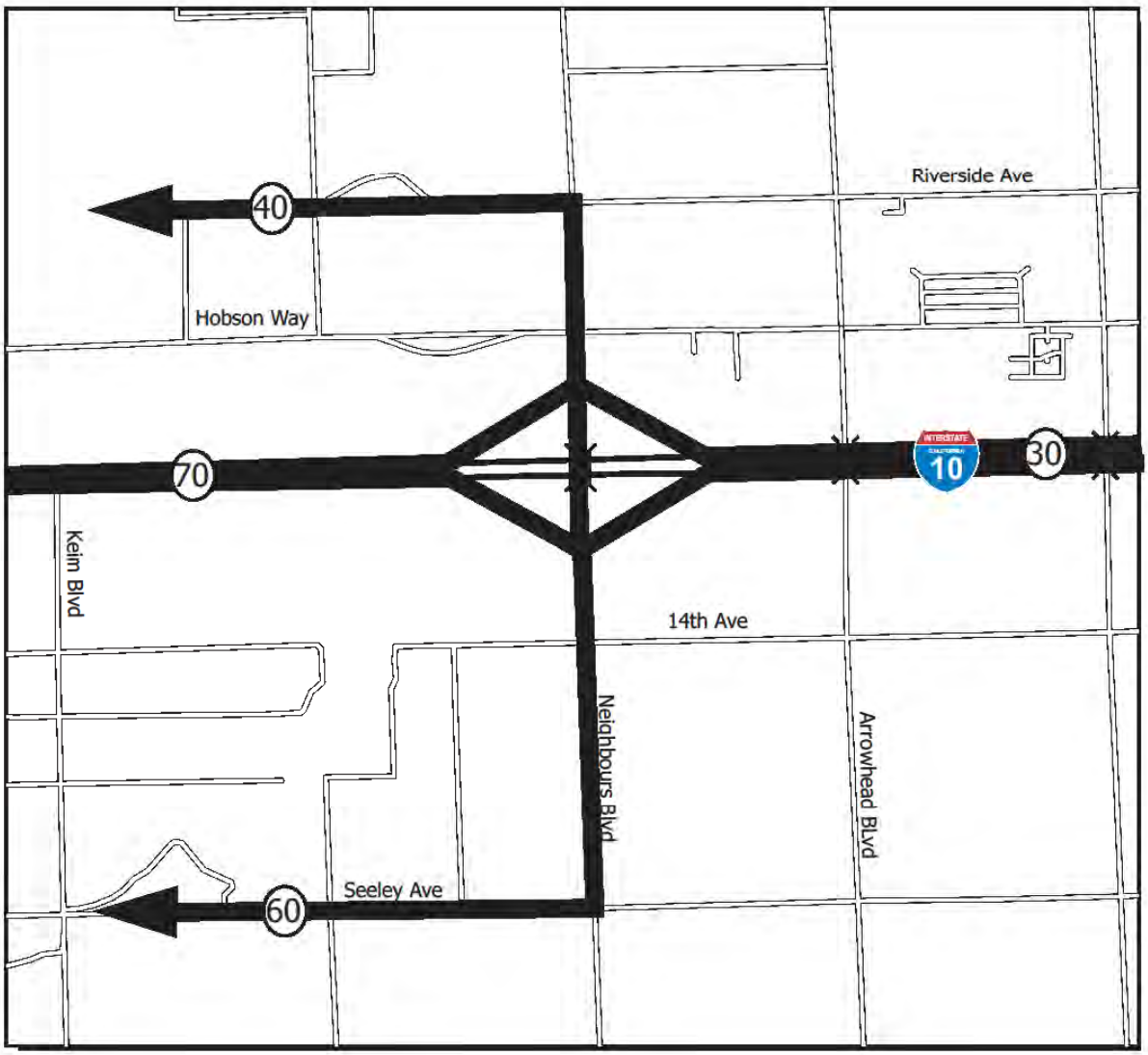


Figure 4-1
Project Site

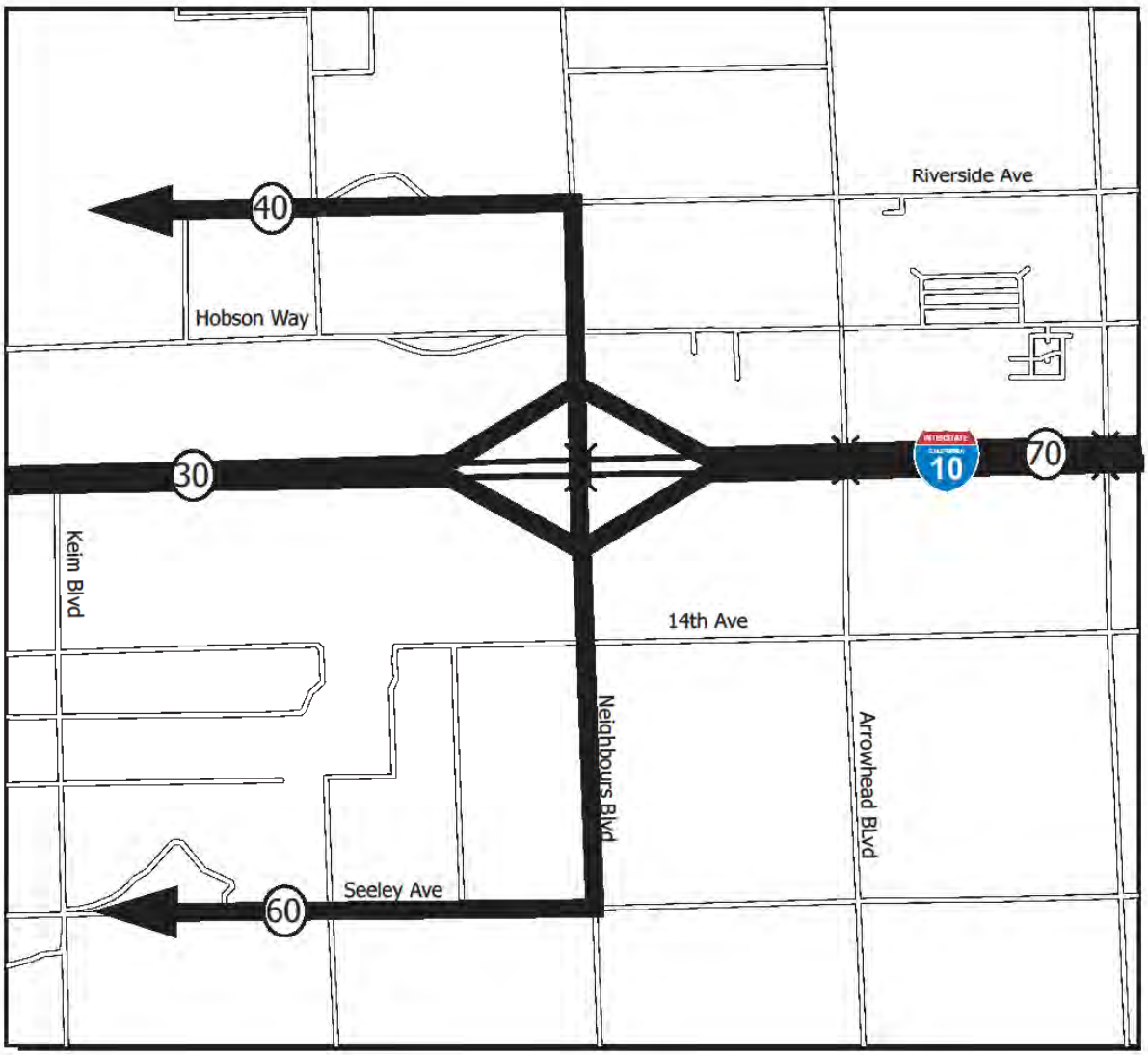


LEGEND

60 Truck Trip Distribution

Figure 4.2A
Truck Project Trip Distribution

N
Not To Scale

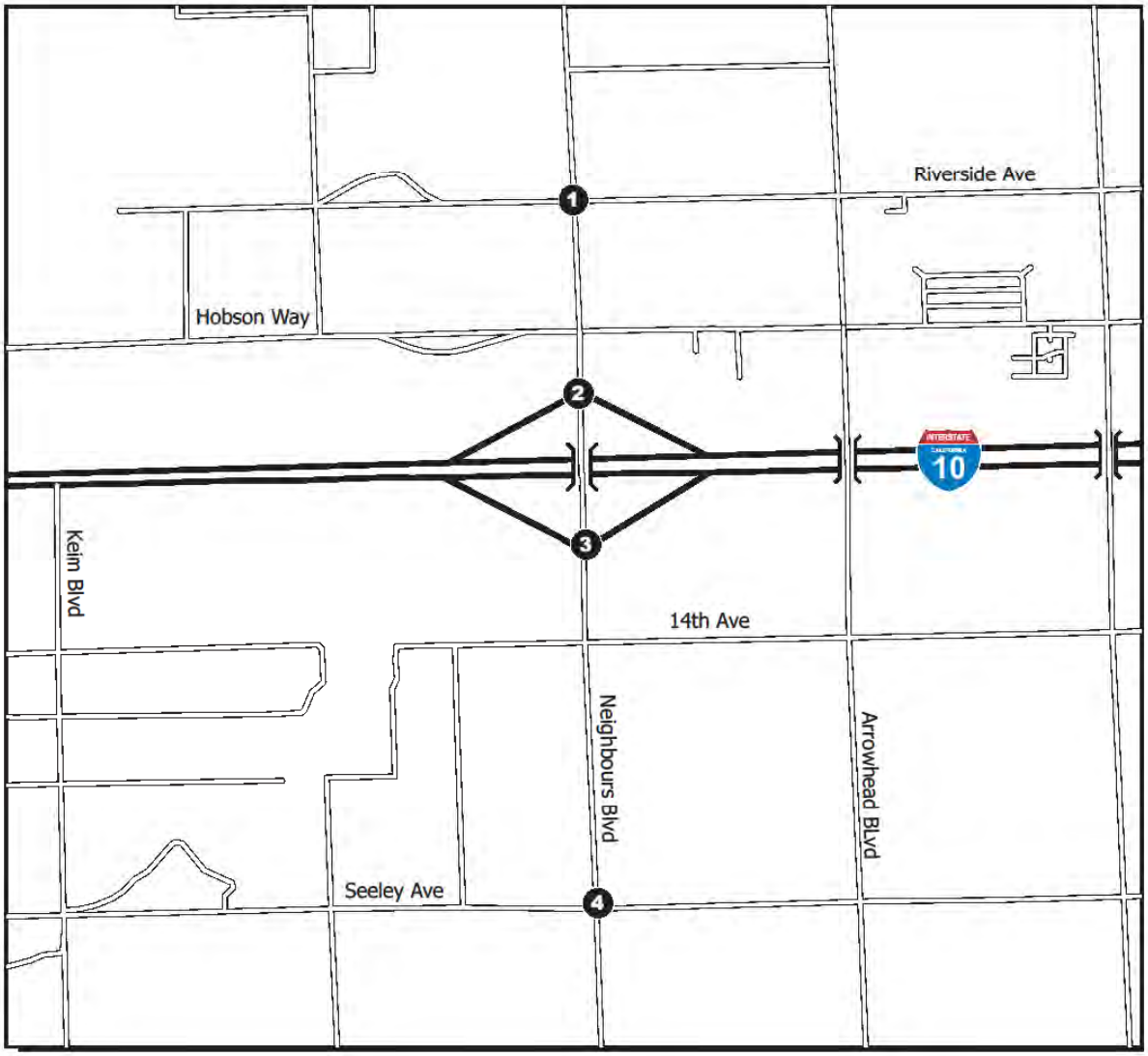


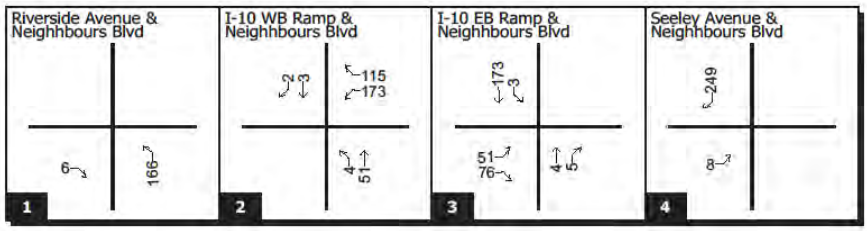
LEGEND

60 Employee Trip Distribution

Figure 4.2B
Employee Project Trip Distribution

N
Not To Scale



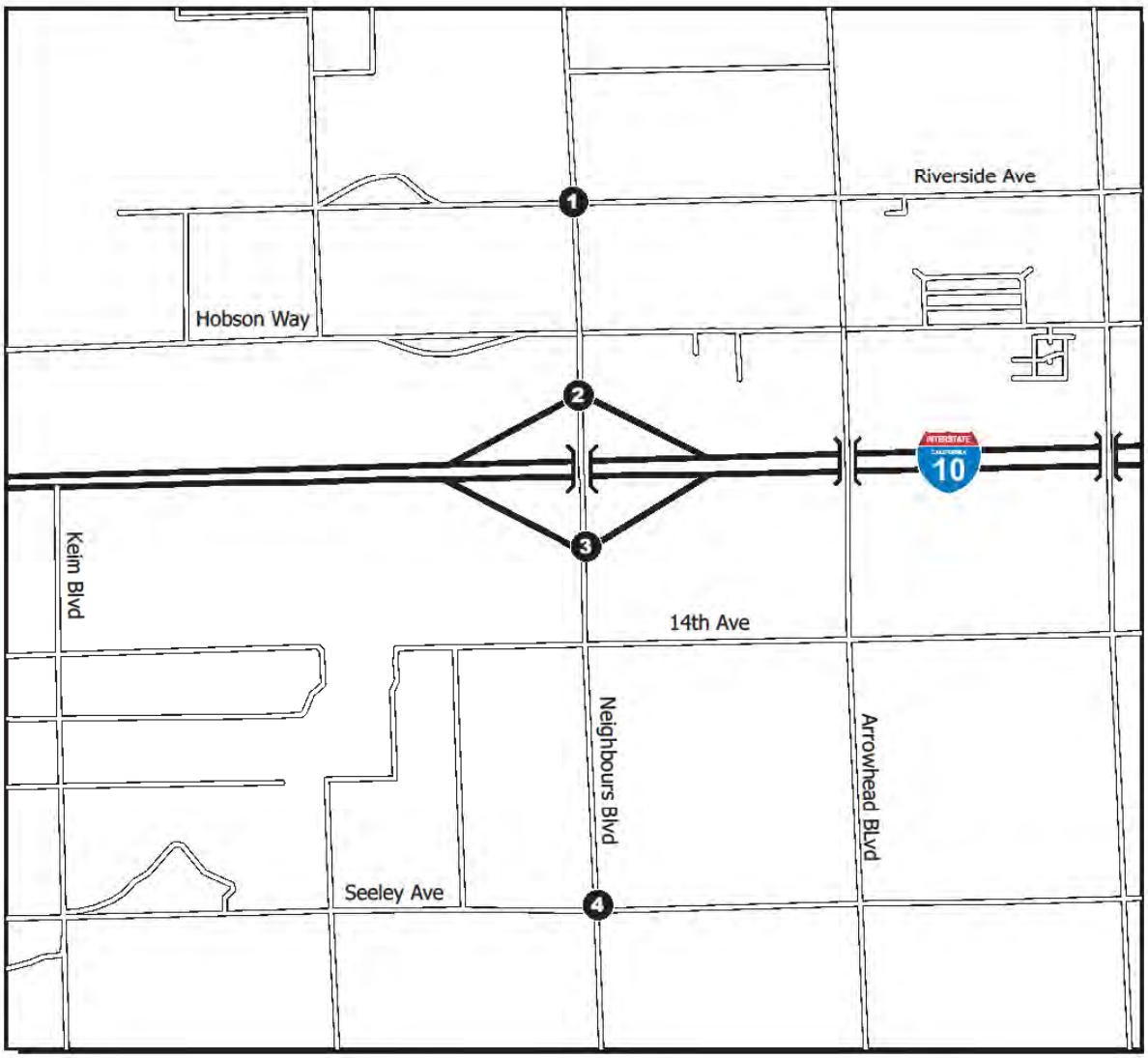


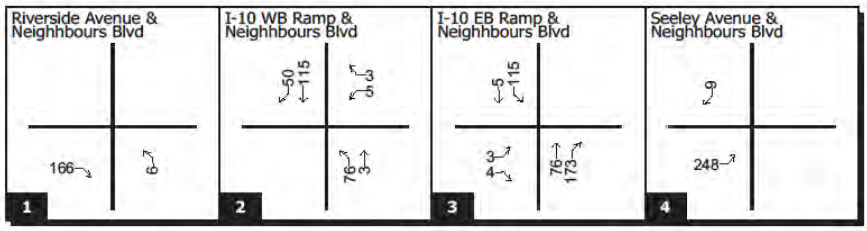
LEGEND

10 AM Peak Hour Trips

Figure 4.3
Project Related Construction Traffic Volumes - AM Peak Hour

N
Not To Scale





LEGEND	
10	PM Peak Hour Trips

Figure 4.4
Project Related Construction Traffic Volumes - PM Peak Hour

N
Not To Scale

CHAPTER 5
PROJECT CONSTRUCTION
(EXISTING + AMBIENT + PROJECT)

This chapter develops future traffic conditions in the study area with ambient growth added without the proposed project construction trips. The Year 2015 was selected for analysis based on correspondence with the applicant regarding the project's construction. It should be noted that the AM project peak hour is expected to occur with the arrival of construction personnel to the job sites at or before 7:00AM. This does not coincide with the AM peak hour of the adjacent street system, which generally occurs between 7:00 AM and 9:00 AM. The PM project peak hour is expected to occur with the departure of all personnel between the hours of 4:00 PM and 6:00PM.

Future Growth

Based on discussions with the County of Riverside, it has been established that traffic in the study area has historically increased at a rate of about 2% per year. Future increases in the background traffic volumes due to regional growth are expected to continue at this rate in the vicinity of the project. Assuming a completion date within 4 years, the existing traffic volumes were adjusted upward by 8% to reflect area wide growth.

Intersections

Based on the project analysis without project construction, all intersections are operating at LOS A which represents a free-flow operation. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The addition of project construction traffic will increase the delay and cause the intersections in the AM peak hour to operate at an LOS B or better for the PM peak hour. LOS B still represents reasonably free-flow operation where the ability to maneuver within the traffic stream is slightly restricted but it is still an acceptable condition. Table 5-1 below documents the without and with project analysis results.

Appendix C contains the analysis worksheets for project construction intersection conditions.

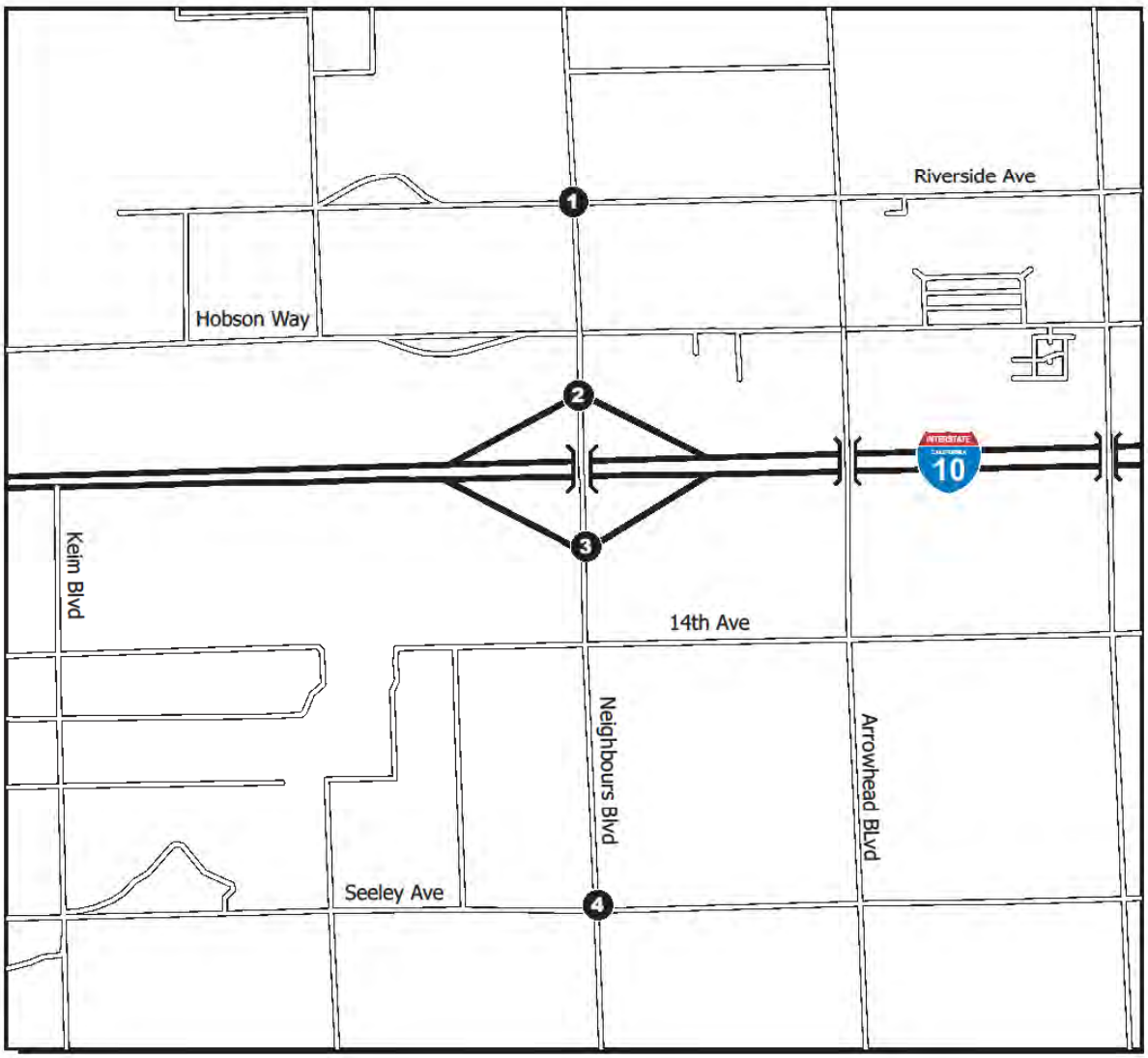
Table 5-1
Project Construction Intersection Conditions

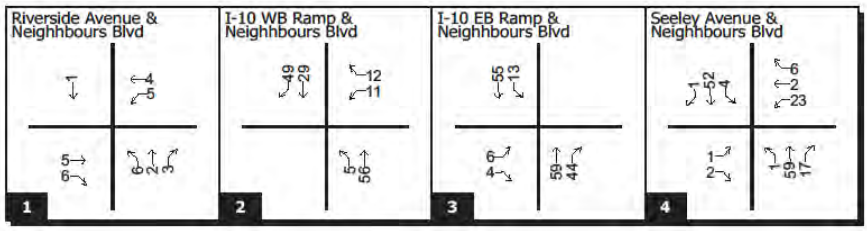
Intersection	Without Project		With Project		Δ Delay	Potential Impact
	Delay	LOS	Delay	LOS		
AM Peak Hour						
1. Riverside Dr & Neighbours Blvd*	9.0	A	16.4	C	7.4	No
2. I-10 WB Ramp & Neighbours Blvd*	9.0	A	11.1	B	2.1	No
3. I-10 EB Ramp & Neighbours Blvd*	9.2	A	11.2	B	2.0	No
4. Seeley Ave & Neighbours Blvd*	9.5	A	10.6	B	1.1	No
PM Peak Hour						
1. Riverside Dr & Neighbours Blvd*	8.6	A	10.2	B	1.6	No
2. I-10 WB Ramp & Neighbours Blvd*	9.5	A	12.5	B	3.0	No
3. I-10 EB Ramp & Neighbours Blvd*	9.6	A	13.8	B	4.2	No
4. Seeley Ave & Neighbours Blvd*	9.9	A	12.9	B	3.0	No

Note: *Unsignalized Intersection

As shown in Table 5-1, all intersections within the study area of the proposed project are operating at an acceptable level of service without and with the project.

Figures 5-1 and 5-4 illustrate the project construction peak hour traffic volumes with and without the project during the AM and PM peak hours.



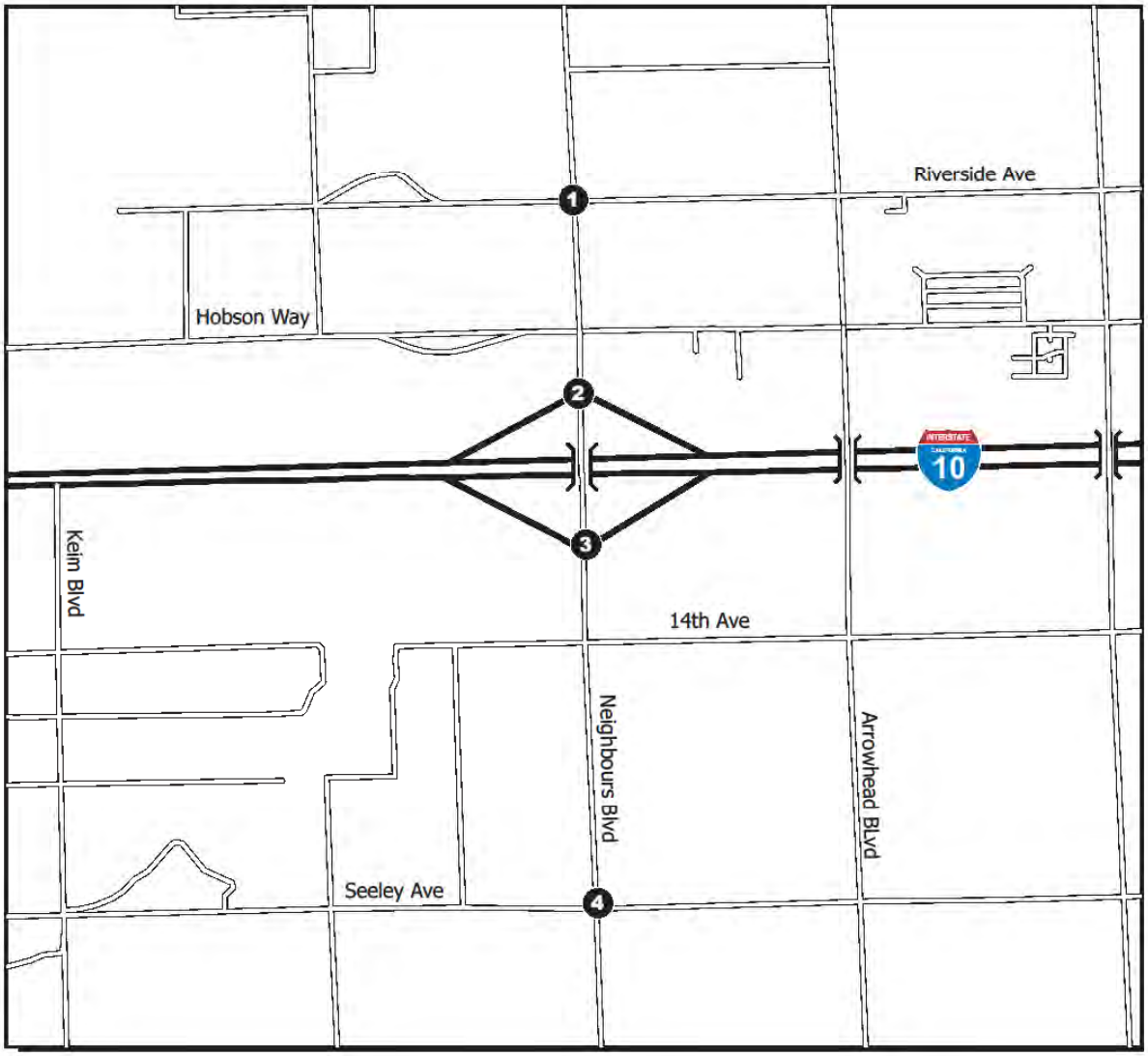


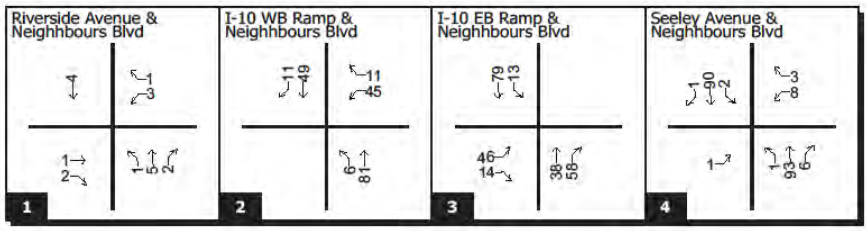
LEGEND

10 AM Peak Hour Traffic

Figure 5.1
Project Construction Traffic Volumes Without Project - AM Peak Hour

N
Not To Scale



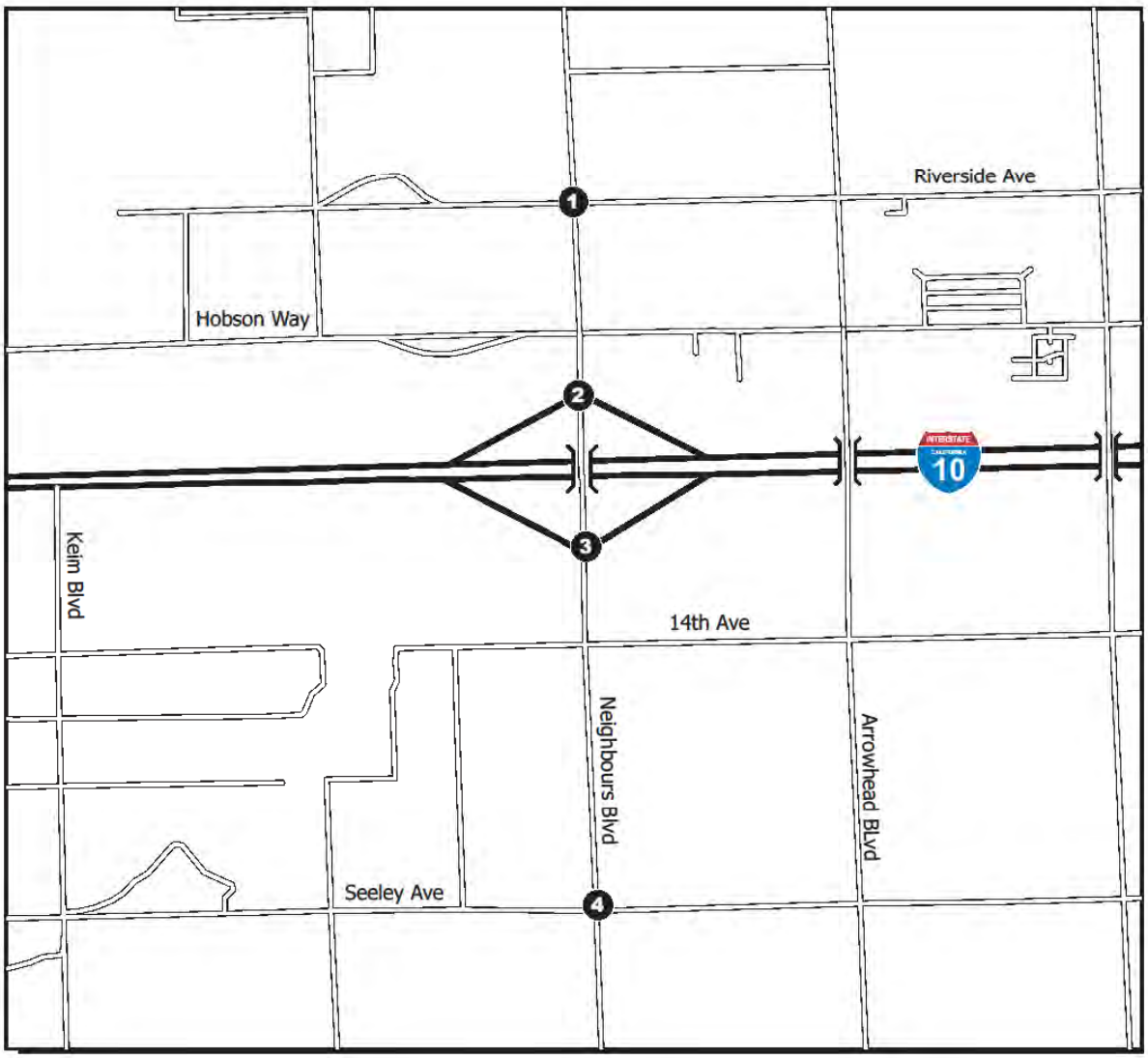


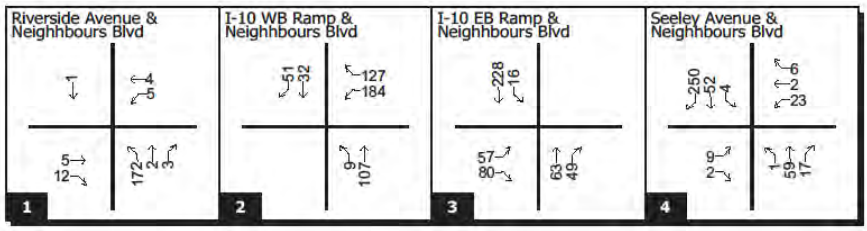
LEGEND

10 PM Peak Hour Traffic

Figure 5.2
Project Construction Traffic Volumes Without Project - PM Peak Hour

N
Not To Scale

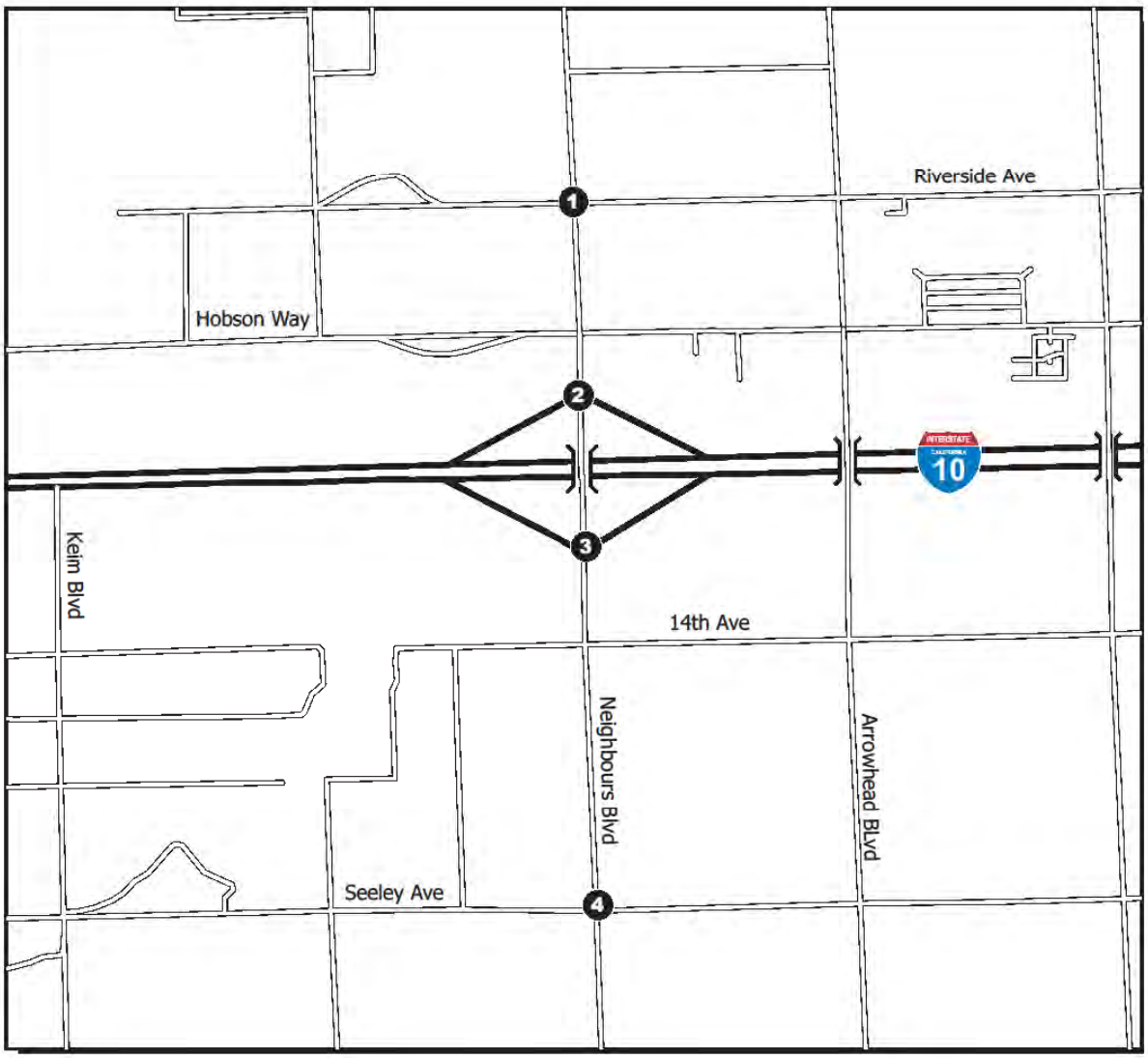


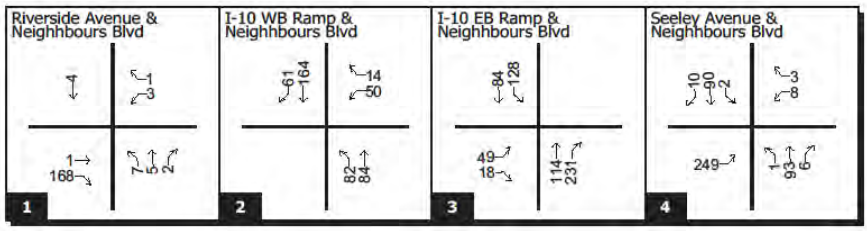


LEGEND	
10	AM Peak Hour Traffic

Figure 5.3
Project Construction Traffic Volumes With Project - AM Peak Hour

N
Not To Scale





LEGEND	
10	PM Peak Hour Traffic

Figure 5.4
Project Construction Traffic Volumes With Project - PM Peak Hour

N
Not To Scale

CHAPTER 6
CUMULATIVE
(EXISTING + AMBIENT + PROJECT + CUMULATIVE)

This chapter develops future traffic conditions in the study area with ambient growth added and cumulative projects without the proposed project construction trips. The Year 2015 was selected for analysis based on correspondence with the applicant regarding the project's construction timeline.. For our analysis we made reasonable assumptions using the best information available to us at the time. The cumulative condition presented below is the **"worst- case scenario**.**"**

Future Growth

Based on discussions with the County of Riverside, it has been established that traffic in the study area has historically increased at a rate of about 2% per year. Future increases in the background traffic volumes due to regional growth are expected to continue at this rate in the vicinity of the project. Assuming a completion date within 4 years, the existing traffic volumes were adjusted upward by 8% to reflect area wide growth.

Cumulative Projects

The cumulative scenario should also consider additional traffic that may be generated by other developments that have been planned or approved. The City of Blythe did not identify any development projects that would add traffic to the intersections analyzed in the study. In coordination with Riverside County Transportation Department representative, potential cumulative projects within the Project vicinity were identified. Approved traffic studies in the vicinity of the Project site were reviewed to eliminate projects that would not contribute traffic to the study area. The cumulative scenario accounts for construction of multiple large energy projects along the I-10 corridor and developments in the City of Blythe. The County of Riverside identified six proposed renewable energy projects listed below that could conceivably be constructed during the year 2015. Table 6-1A lists cumulative projects that would have the potential to contribute to cumulative impacts. Table 6-1B lists the cumulative projects that were considered, but eliminated, because they would not contribute traffic impacts to the four study intersections. For example, the approved Rio Mesa Solar Electric Generating Facility would utilize the Mesa Interchange; therefore it would not impact the four study intersections.

Table 6-1A
Cumulative Projects Included in Analysis

PROJECT NAME/APPLICANT	PROJECT DESCRIPTION	STATUS
Solar Cumulative Projects		
Blythe Airport Solar I Project/ • U.S. Solar EA # 42340	100 MW photovoltaic power plan on 640 acres in five- 20 MW phases that includes a 3,200 ft long 33 kV generation tie.	Approved November 2010
Blythe Solar Power Project/ • Solar Millennium CACA 48811	Concentrated solar thermal electric generating facility, using solar parabolic trough technology, with four adjacent and independent units of 250 MW nominal capacity each for a total nominal capacity of 1,000 MW.	Suspension issued August 2011
Blythe Energy Project II	520 MW combined-cycle power plant located entirely within the Blythe Energy Project site boundary. Blythe Energy Project II will interconnect with the Buck Substation constructed by WAPA as part of the Blythe Energy Project. Project is designed on 20 acres of a 76-acre site.	Approved 2005 Request for Construction commencement 2011-2016
Palo Verde Mesa Solar Project	437 MW PV solar plant that includes a 14-mile long transmission line to the Colorado River Substation.	Planned NOP issued August 2012
Rio Mesa Solar Electric Generating Facility • BrightSource Energy, Inc • 2011-AFC-04 • CACA 53138	Consists of three 250 MW solar concentration thermal power plants (750 MW total). Each plant requires about 1,850 acres (or 2.9 square miles) of land to operate. A 119 acre common area will include a combined administration, control, and maintenance facilities. The total area, including shared facilities, is approximately 5,750 acres.	Suspension issued January 2013
Desert Quartzite/ • First Solar Development, Inc • CACA 49397	600 MW, Photovoltaic, 7,245 acres disturbed, no transmission line	Planned
County of Riverside Projects		
PM33797	Schedule H: Divide 2.14 acres into 2 single family residential parcels	Planned
PM34400	Schedule H: Divide 80 acres into 2 single family residential	Planned
PM34759	Schedule H: Divide 34 acres into 3 parcels	Planned
PP23885	Church with accessory outdoor recreation/amphitheater 8,890 square feet Church	Planned

Table 6-1B
Cumulative Projects Considered

PROJECT NAME/APPLICANT	PROJECT DESCRIPTION
Solar/Transmission Line Projects	
Blythe Solar Power Generation Station 1, LLC	A planned 4.76 MW solar PV facility, on 29.4 acres, consisting of 69 PV panels that stand approximately 50-feet tall an d 72-feet wide, a 200 square foot equipment building, and a twenty-foot perimeter fire access road.
Brightsource Energy CACA 51967	Solar energy facility to occupy a total of 12,269 acres.
Genesis Solar Energy Project	The project consists of two independent solar electric generating facilities with a nominal net electrical output of 125 megawatts (MW) each, for a total net electrical output of 250 MW.
Wiley's Well Communication Tower	The site is located adjacent to an existing communication tower, approximately 0.25 mile south of Interstate 10 and immediately west of Wiley Well Road, approximately 18 miles west of Blythe. The proposed project will place a tower and equipment shelter at the site.
Ridgeline Energy, LLC	50-100 MW solar PV or concentrated PV energy facility. The project would include a solar panel array, a maintenance building, an administration building, a raw water storage tank, a demineralized water tank, a potable water tank, and a 230 kV or lower transmission line and substation (Ridgeline Energy, LLC, 2010a).
Mule Mountain Solar Project/ • Bullfrog Green Energy, LLC • CAC 49097	Photovoltaic, 500 MW, project includes a transmission line, 6,600 acres disturbed
Mule Mountain Soleil Project/ • enXco • CACA 49488	200 MW solar PV that would disturb approximately 1,600 acres. Withdrawal request letter sent 4/16/11
Desert Southwest Transmission Line	118-mile 500 kV transmission line from new substation/switching station near Blythe Energy Project to the existing Devers Substation. Located adjacent to SCE's existing 500 kV Devers – Palo Verde 1 transmission line. Approximately 4,290 acres of ROW. Plans for development are being finalized with construction commencing soon.
Devers – Palo Verde 2 Transmission Line •CUPC A. 05-04-015 • CACA 048771	41.6-mile Devers-Valley No. 2 transmission line, an alternative to the West of Devers portion of the DPV2 project proposed by SCE. Devers-Valley No. 2 will be a second 500 kV transmission line between the Devers substation and SCE's Valley Construction anticipated for 4th quarter 2011 and in-service 3rd quarter 2013.
McCoy Solar Energy Project • McCoy Solar, LLC CACA 48728	Up to a 750 MW PV solar power plant using photovoltaic technology. MW, solar thermal, 7,700 acres disturbed. Approximately 16 mile long 230 kV generation-tie and switchyard that will connect to SCE's Colorado River Substation.
Mc Coy Soleil Project • enXco, Inc CACA 49490	300 MW PV solar plant, 20,484. POD submitted
Colorado River Substation Expansion	Proposed to be expanded as a 500/230 kV substation and would be constructed in an area approximately 1,000 feet by 1,900 feet, permanently disturbing approximately 90 acres. The 500 kV switching station would include buses, circuit breakers, and disconnect switches. The switchyard would be equipped with 108-foot-high dead-end structures. Outdoor night lighting would be designed to illuminate the switchrack when manually switched on.

Table 6-1B
Cumulative Projects Considered (continued)

PROJECT NAME/APPLICANT	PROJECT DESCRIPTION
County of Riverside Projects	
PAR01198	Subdivide 33.83 Parcels Into 46 1/2 Acre Lots
PM35085R1	Divide 55 Acres Into 4 Industrial Lots
CUP02042R1	Extend Life & Add 3 Tanks To Existing Facility
CUP03187	Batch Plant, Manfg Pre-Cast Concrete & Wooden Pall
CUP03223	Gas Station, Fast Food,Motel, Conv.Store-'Fast Track
CUP03302	Auto Wrecking And Recycling Yard
CUP03602	Install 21 Megawatt Photovoltaic Array Facility
PAR00281	Parcel Map
PM35085R1	Par Review To Divide 10.4 Acres Four Lots
PM26557	To Divide Approx. 130 Acres Into 3 Parcels W/40 Ac
PM28239	Divide 14 Acres Into 4 Parcels
PM35085	Divide 51 Acres Into 30 Parcels - Schedule "E"
PM36025	Divide 34 Ac Into Three Parcels - Schedule "H" See Pp23885
PP16258	Telecommunications 110 Ft Monopole & Equip.
PP18264	Permit Existing Liquid Fertilizer Tank Farm
PP18990	Boat And Trailer Storage Facility
PP19016	Auto Body Repair Shop Expansion, Inc. Paint Booth
PUP00731	Recovery Ranch For Substance Abuse Treatment

Cumulative Analysis

Should the peak construction schedules of the cumulative projects listed in Table 6-1A overlap, construction traffic from these projects would result in increased traffic within several miles or more along I-10 and regional roadways. For the analysis, the best information available was used to create reasonable assumptions. Although it is very unlikely that the peak construction periods of multiple projects would coincide, as a conservative analysis, the cumulative conditions represented in Table 6-2 analyze the worst-case scenario**.** In doing this we address any uncertainty; such exists with the current suspension of the Blythe Solar Power Project and Rio Mesa Solar Electric Generating Facility; as such, these two projects would likely not be constructed at the same time as the project. However, there may still be some overlap in overall construction schedules (peak and non-peak) for a few cumulative projects. Traffic from these cumulative projects were added to 2015 projected traffic.

Table 6-2 lists the anticipated delays and LOS conditions that would result with the addition of the cumulative projects. Figures 6-1 and 6-2 illustrate the cumulative peak hour traffic volumes without the project during the AM and PM peak hours. With the addition of the cumulative projects, the 2015-year cumulative conditions analysis without the Project would result in two study intersections operating at an acceptable LOS and the two locations mentioned below operating an unacceptable LOS. Table 6-3 lists each solar project's contribution (number of trips and percentage) to the cumulative scenario. In addition to the project, the major cumulative contributors to traffic impacts include the Rio Mesa Solar Electric Generating Facility, Desert Quartzite and Palo Verde Mesa Solar Project.

- Neighbours Boulevard and I-10 Westbound Ramps
    - During the p.m. peak hours would operate at LOS F with a delay of 4.29 minutes (257.1seconds). The major contributors to the cumulative scenario include the Rio Mesa Solar Electric Generating Facility, Desert Quartzite, and Palo Verde Mesa Solar Project.
- Neighbours Boulevard and I-10 Eastbound Ramps
    - During the a.m. peak hour would operate at LOS D with an intersection delay of 34.7 seconds; during the p.m. peak hour would operate at an LOS F with an intersection delay of 4.9 minutes (294.0 seconds). The major contributors to the cumulative scenario include the Rio Mesa Solar Electric Generating Facility, Desert Quartzite, and Palo Verde Mesa Solar Project.

As shown in Table 6-2, the addition of the project traffic and cumulative trips generated by other projects located within the study area will cause deterioration in LOS at the four intersections; only the Riverside Drive and Neighbours Boulevard intersection during the p.m. peak hour would operate at an acceptable LOS. The cumulative scenario intersection delays from with and without project construction would increase approximately 3.2 seconds to 190.4 seconds (3.2 minutes); in some instances will experience "overflow conditions" which is described below. Figures 6-3 and 6-4 illustrate the cumulative peak hour traffic volumes with the project during the AM and PM peak hours.

- Neighbours Boulevard and Riverside Drive
    - During the a.m. peak hour would reduce from LOS B to LOS E with an intersection delay increase of 25.9 seconds, because the project would contribute 53.6 percent of the cumulative traffic and the Palo Verde Mesa Solar Project would contribute 53 percent. The p.m. peak hour would continue to operate at an LOS B with an intersection delay increase 3.2 seconds
- Neighbours Boulevard and I-10 Westbound Ramps
    - During the a.m. peak hour would reduce from LOS C to LOS F with an intersection delay increase of 51.4 seconds, because the major contributors to cumulative traffic include the Palo Verde Mesa Solar Project (35.0 percent), the project (28.4 percent), and Rio Mesa Electric Generating Facility (13.9 percent,. During the p.m. peak hour would reduce from LOS F to overflow condition, because the major contributors to cumulative traffic include Palo Verde Mesa Solar Project (34.4 percent), the project (20.2 percent), and Rio Mesa Electric Generating Facility (18.7 percent), Desert Quartzite (15 percent).
- Neighbours Boulevard and I-10 Eastbound Ramps
    - During the a.m. peak hour would reduce from LOS D to LOS F with an intersection delay increase of 2.15 minutes (129.2 seconds), because the major contributors to cumulative traffic include the Rio Mesa Electric Generating Facility (34.1 percent), Desert Quartzite (27.3 percent), the project (24.9 percent), and Palo Verde Mesa Solar Project (10.8 percent), During the p.m. peak hour would reduce from LOS F to overflow condition, because the major contributors to cumulative traffic include the Rio Mesa Electric Generating Facility (34.1 percent), Desert Quartzite (27.3 percent), the project (24.9 percent), and Palo Verde Mesa Solar Project (10.8 percent)

- Neighbours Boulevard and Seeley Avenue
    - During the a.m. peak hour would reduce from LOS C to LOS D with an intersection delay increase of 6.1 seconds, because the major contributors to cumulative traffic include the Rio Mesa Solar electric Generating Facility (40.4 percent), Desert Quartzite (32.3 percent), and the project (24.3 percent). During the p.m. peak hour would reduce from LOS C to LOS D with an intersection delay increase of 3.17 minutes (190.4 seconds), because the major contributors to cumulative traffic include the Rio Mesa Solar Electric Generating Facility (38.9 percent), Desert Quartzite (31.2 percent), and the project (26.2 percent).

The 2015 cumulative scenario with project construction results in two intersections operating at "overflow conditions" during the p.m. peak hours. An intersection will exhibit an overflow condition when the average arrival rate of vehicles exceeds capacity of the roadway. This can occur when an area experiences a high increase in traffic demand and cannot handle the excessive delay for movements. The intersection is then oversaturated and results in a system operating at a non-equilibrium state. Assuming a constant arrival rate and capacity, the queue length at the intersection increases constantly.

Appendix D contains the analysis worksheets for cumulative intersection conditions.

Table 6-2
Cumulative Intersection Conditions

Intersection	Without Project		With Project		Δ Delay	Potential Impact
	Delay	LOS	Delay	LOS		
AM Peak Hour						
1. Riverside Dr & Neighbours Blvd*	14.2	B	40.1	E	25.9	Yes
2. I-10 WB Ramp & Neighbours Blvd*	19.2	C	70.6	F	51.4	Yes
3. I-10 EB Ramp & Neighbours Blvd*	34.7	D	163.9	F	129.2	Yes
4. Seeley Ave & Neighbours Blvd*	23.3	C	29.4	D	6.1	Yes
PM Peak Hour						
1. Riverside Dr & Neighbours Blvd*	10.0	B	13.2	B	3.2	No
2. I-10 WB Ramp & Neighbours Blvd*	257.1	F	Overflow	F	-	Yes
3. I-10 EB Ramp & Neighbours Blvd*	294.0	F	Overflow	F	-	Yes
4. Seeley Ave & Neighbours Blvd*	21.8	C	212.2	F	190.4	Yes

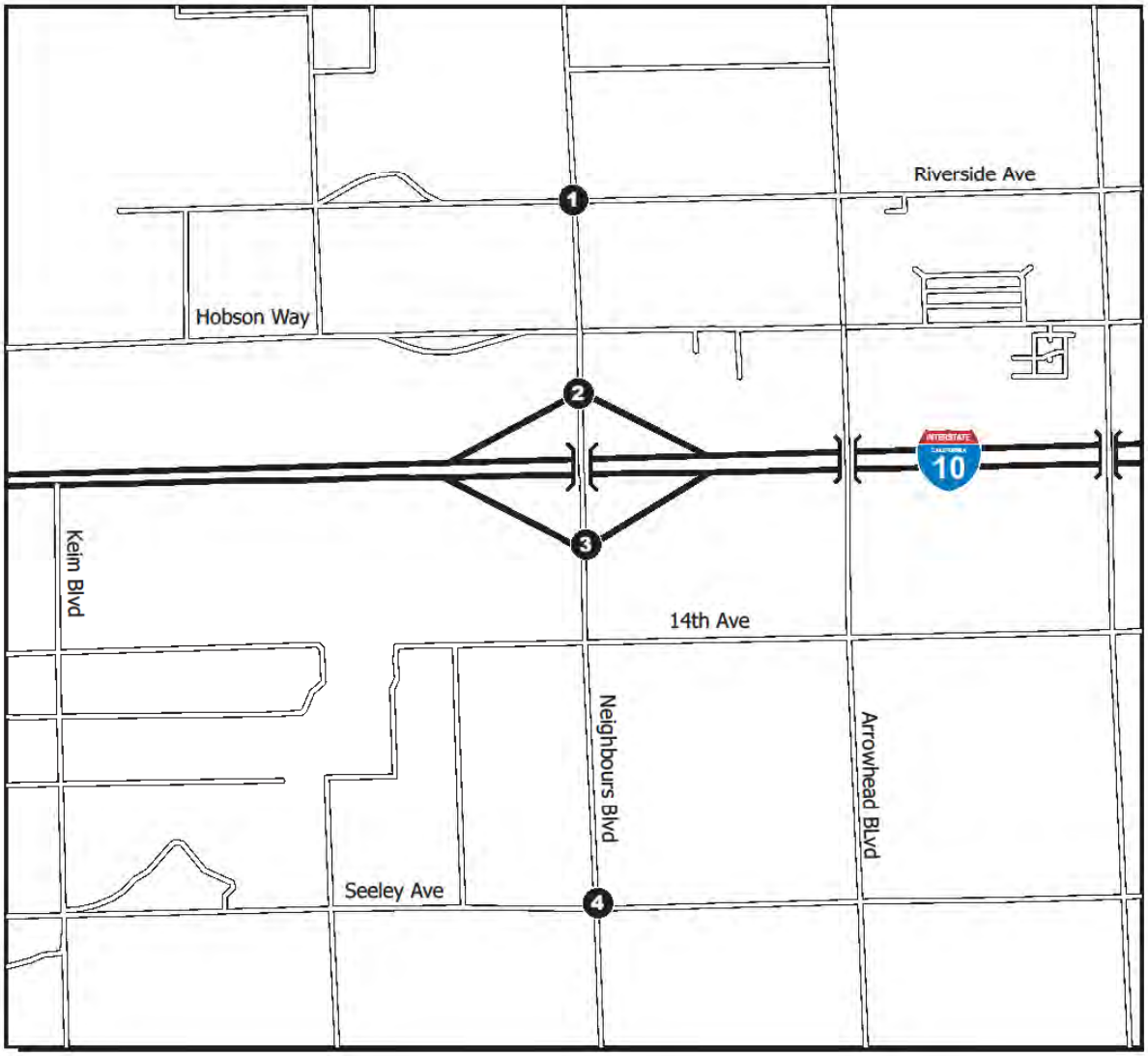
Note: *Unsignalized Intersection

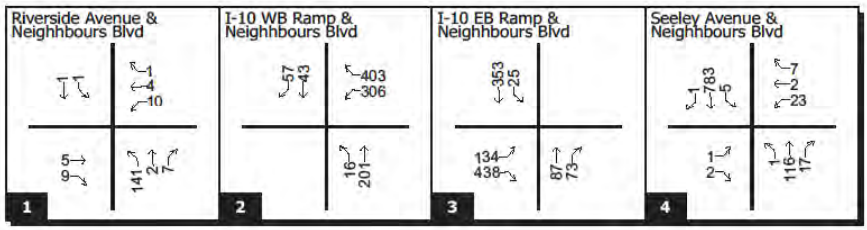
The impacts discussed above are related to the construction of numerous solar projects, which is considered temporary. The operational trips related to the solar projects are significantly less than construction. For example, the proposed Blythe Mesa Solar project, will require 12 permanent full-time employees in comparison to the anticipated 500 workers required for peak construction. Therefore, it is anticipated that the LOS for all four study intersection will be restored back to preconstruction conditions once construction of these projects are completed.

Table 6-3
Cumulative Project Trip and Percentage Contribution*

Intersection	Blythe Mesa		Blythe Solar		Rio Mesa		Desert Quartzite		Palo Verde		Blythe Energy		Blythe Airport Solar		Other Cumulative Projects.		Ambient Growth		Total
	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	Trips	% of Total	
AM Peak Hour																			
1. Riverside Dr & Neighbours Blvd	172	53.6%	0	0.0%	0	0.0%	0	0.0%	138	43.0%	0	0.0%	3	0.9%	8	2.6%	0	0.0%	321
2. I-10 WB Ramp & Neighbours Blvd	348	28.4%	45	3.7%	170	13.9%	136	11.1%	429	35.0%	75	6.1%	2	0.2%	7	0.6%	13	1.1%	1225
3. I-10 EB Ramp & Neighbours Blvd	312	24.9%	15	1.2%	427	34.1%	342	27.3%	135	10.8%	3	0.2%	2	0.1%	5	0.4%	12	1.0%	1253
4. Seeley Ave & Neighbours Blvd	257	24.3%	15	1.4%	427	40.4%	342	32.3%	0	0.0%	0	0.0%	2	0.1%	5	0.4%	11	1.0%	1058
PM Peak Hour																			
1. Riverside Dr & Neighbours Blvd	172	53.3%	0	0.0%	0	0.0%	0	0.0%	138	42.7%	0	0.0%	3	1.0%	10	3.0%	0	0.0%	323
2. I-10 WB Ramp & Neighbours Blvd	252	20.2%	45	3.6%	233	18.7%	187	15.0%	429	34.4%	75	6.0%	3	0.2%	9	0.7%	15	1.2%	1248
3. I-10 EB Ramp & Neighbours Blvd	376	25.0%	45	3.0%	382	25.4%	306	20.4%	295	19.7%	72	4.8%	2	0.1%	5	0.3%	18	1.2%	1501
4. Seeley Ave & Neighbours Blvd	257	26.2%	15	1.5%	382	38.9%	306	31.2%	0	0.0%	0	0.0%	2	0.2%	5	0.5%	15	1.5%	981

* The cumulative contribution percentages for the projects were rounded; therefore, the sum of the percentages may not equal 100 percent.

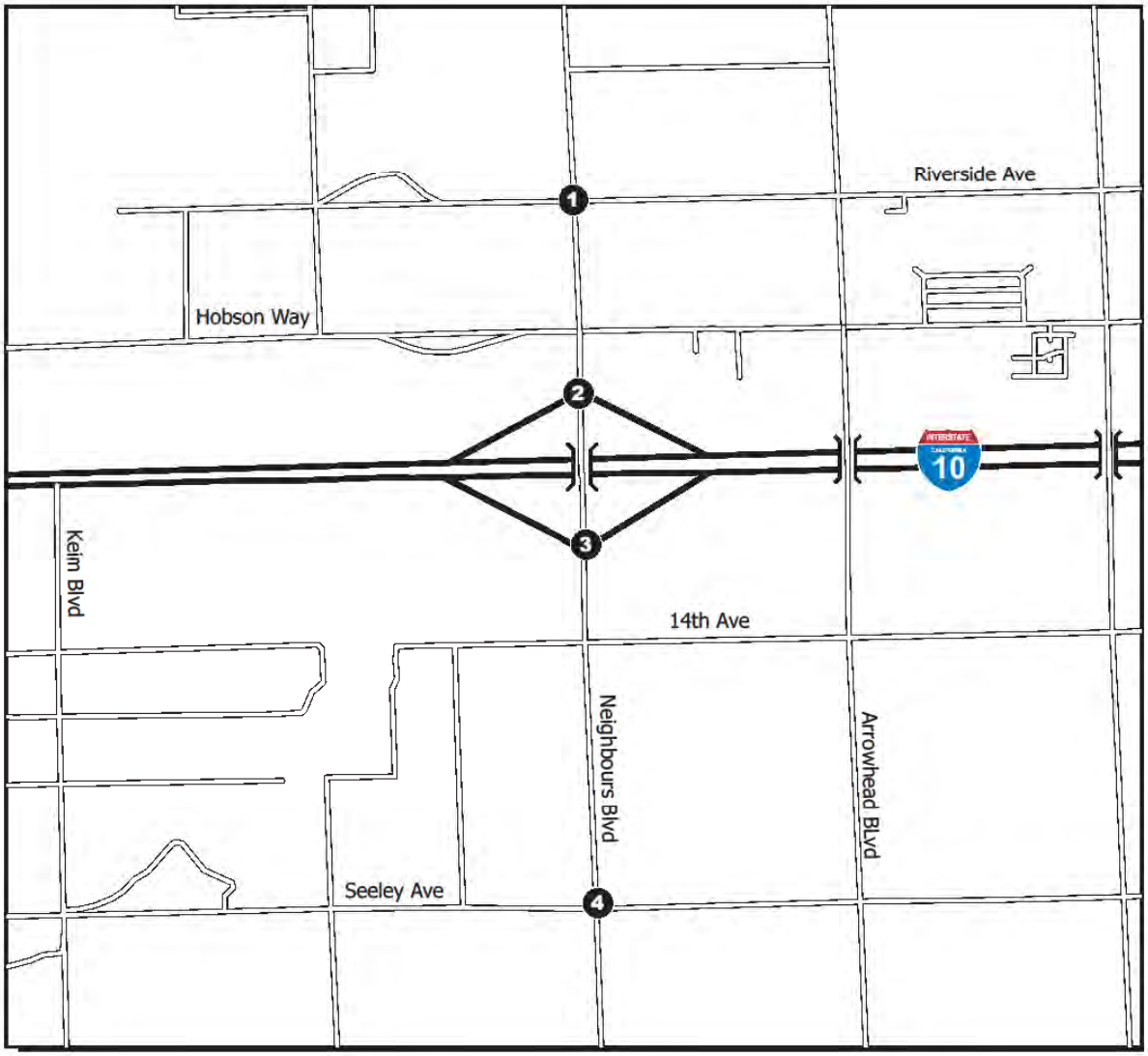


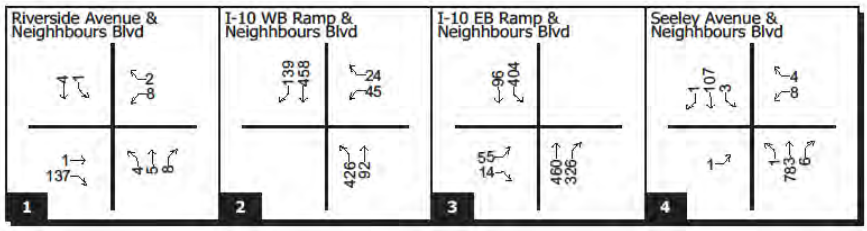


LEGEND	
10	AM Peak Hour Traffic

Figure 6.1
Cumulative Traffic Volumes Without Project - AM Peak Hour

N
Not To Scale



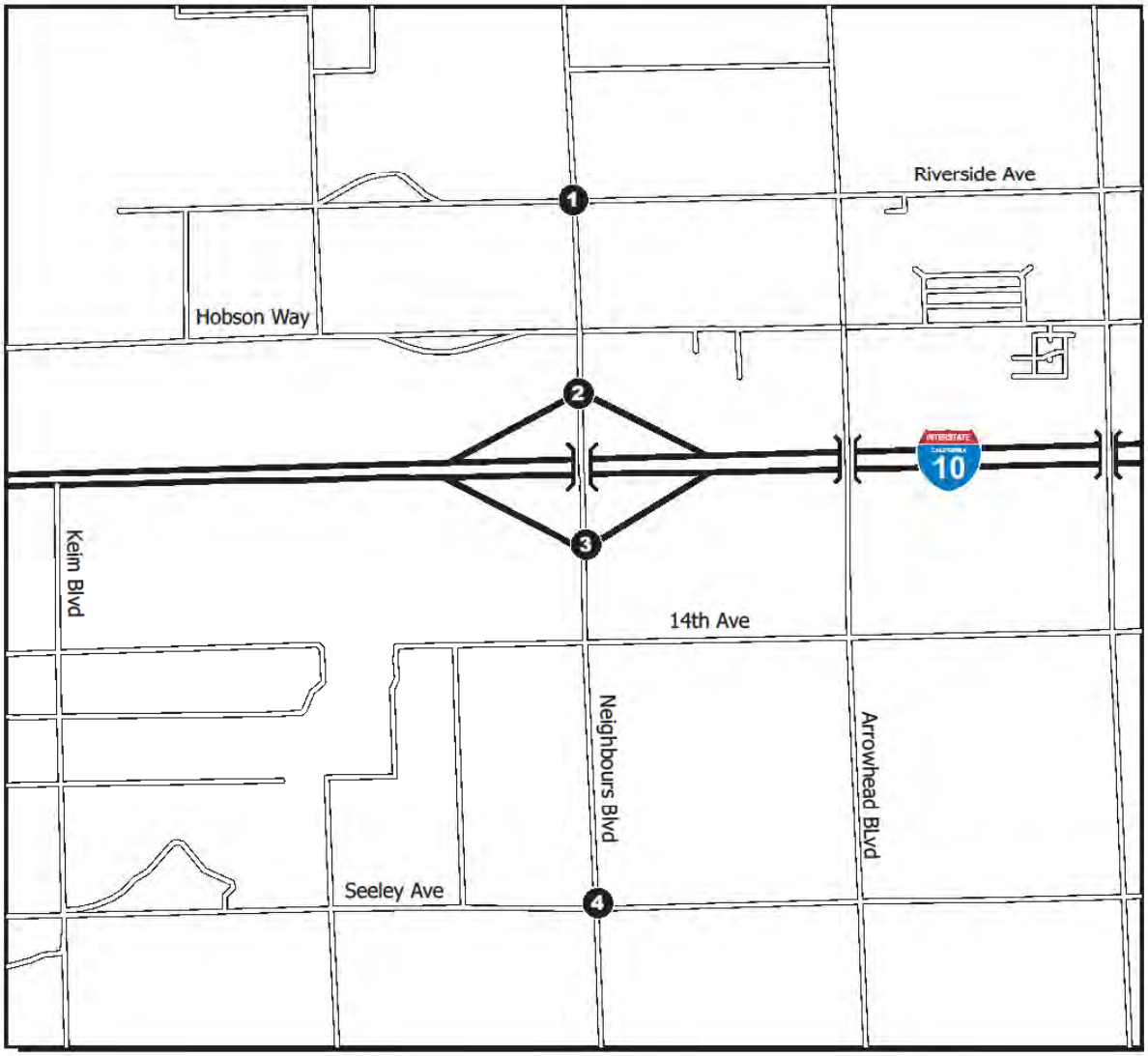


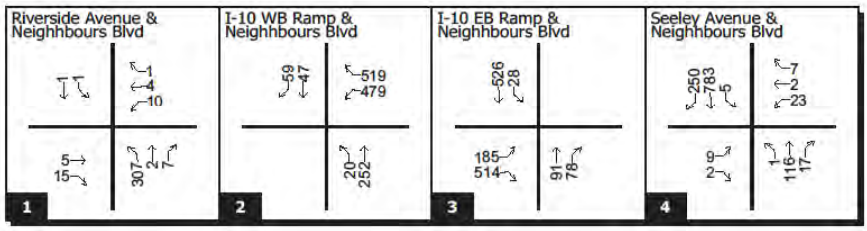
LEGEND

10 PM Peak Hour Traffic

Figure 6.2
Cumulative Traffic Volumes Without Project - PM Peak Hour

N
Not To Scale



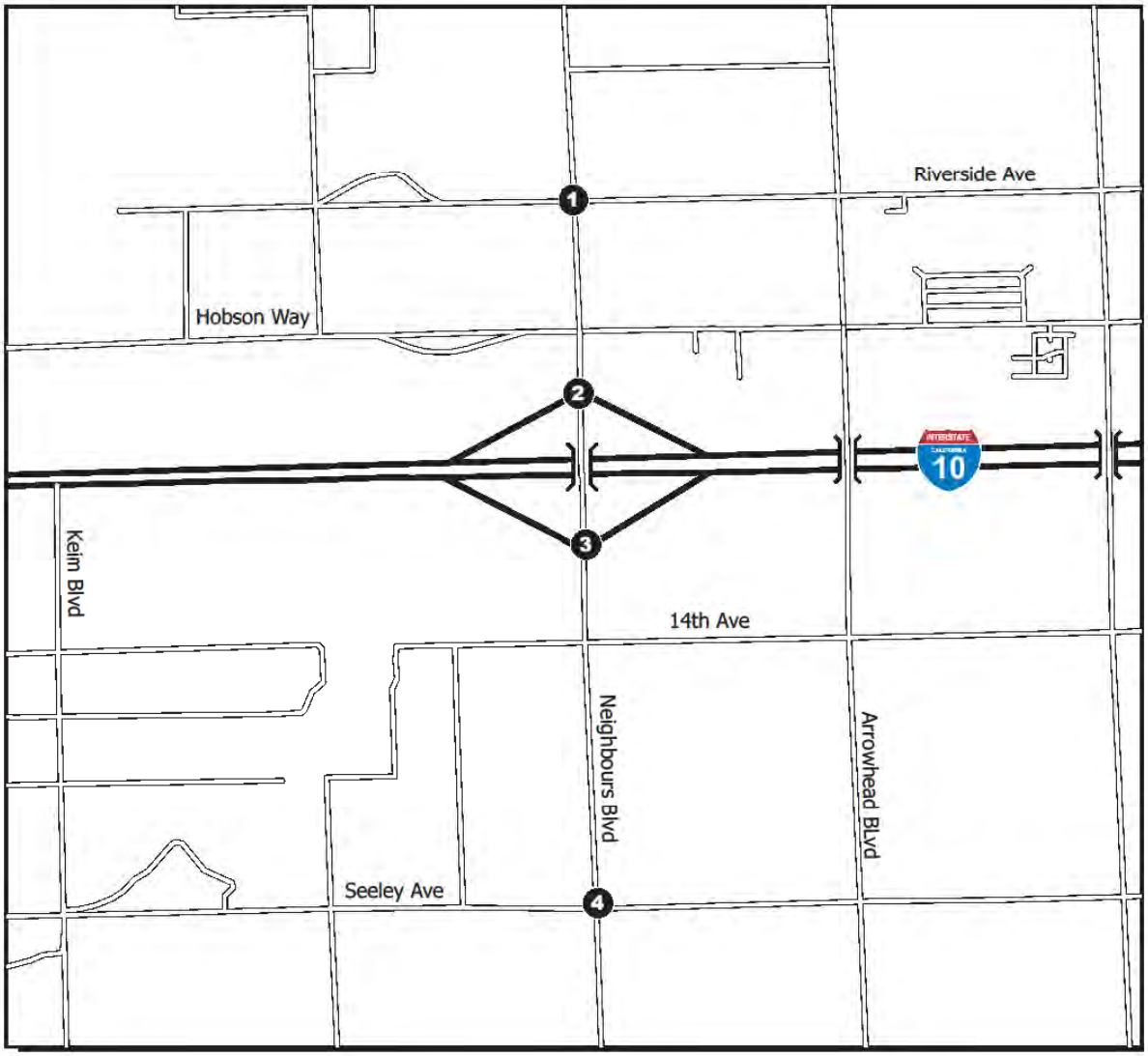


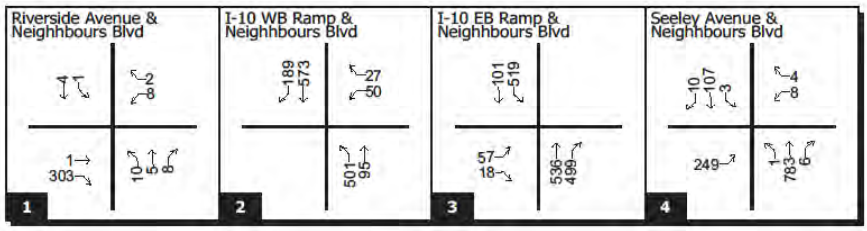
LEGEND

10 AM Peak Hour Traffic

Figure 6.3
Cumulative Traffic Volumes With Project - AM Peak Hour

N
Not To Scale





LEGEND	
10	PM Peak Hour Traffic

Figure 6.4
Cumulative Traffic Volumes With Project - PM Peak Hour

N
Not To Scale

CHAPTER 7
SUMMARY OF ANALYSIS

This chapter summarizes the anticipated changes from the existing conditions (2011), projected 2015 Conditions (existing plus ambient growth), and Cumulative Conditions (existing plus ambient growth plus cumulative projects). Tables 7-1 show the summary of intersection conditions for each scenario for AM and PM peak periods, respectively.

Table 7-1
Intersection Analysis Summary

	Existing Conditions (2011)		**Anticipated 2015 Conditions** *(Existing + Ambient)*				**Cumulative Conditions** *(Existing + Ambient +Cumulative)*			
	Without Project		Without Project		With Project		Without Project		With Project	
Intersection	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
AM Peak Hour										
1. Riverside Dr & Neighbours Blvd*	9.0	A	9.0	A	16.4	C	14.2	B	40.1	E
2. I-10 WB Ramp & Neighbours Blvd*	9.0	A	9.0	A	11.1	B	19.2	C	70.6	F
3. I-10 EB Ramp & Neighbours Blvd*	9.2	A	9.2	A	11.2	B	34.7	D	163.9	F
4. Seeley Ave & Neighbours Blvd*	9.4	A	9.5	A	10.6	B	23.3	C	29.4	D
PM Peak Hour										
1. Riverside Dr & Neighbours Blvd*	8.6	A	8.6	A	10.2	B	10.0	B	13.2	B
2. I-10 WB Ramp & Neighbours Blvd*	9.5	A	9.5	A	12.5	B	257.1	F	Overflow	F
3. I-10 EB Ramp & Neighbours Blvd*	9.5	A	9.6	A	13.8	B	294.0	F	Overflow	F
4. Seeley Ave & Neighbours Blvd*	9.8	A	9.9	A	12.9	B	21.8	C	212.2	F

Note: *Unsignalized Intersection

As shown in Table 7-1, with the addition of more project trips, the LOS reduces and delays at each of the four study intersections increases. With the addition of peak construction trips from three of four major solar projects, it further deteriorates the LOS and increases the delays at each of the study intersections. In the existing conditions (2011) scenario all intersections are operating an LOS A with intersection delays ranging from 8.6 seconds to 9.8 seconds. With the addition of ambient growth, the anticipated 2015 conditions without project scenario will still operate at an LOS A and experience intersection delays ranging from 8.6 to 9.9 seconds. The 2015 plus project scenario, which will add approximately 429 trips, will result in all study intersections operating at an LOS B, with the exception of Riverside Drive and Neighbours Boulevard intersection which will operate at an LOS C during the a.m. peak hour. The intersection delays would range from 10.2 seconds to 16.4 seconds. During the cumulative scenario without project (addition of approximately 149 to 1107 cumulative trips), two intersections will operate at an acceptable LOS (LOS B or C); the I-10 Westbound Ramp and Neighbours Boulevard intersection would operate at an LOS C during the a.m. peak hours, but operate at an LOS F during the p.m. peak hours; and the I-10 Eastbound Ramp and Neighbours Boulevard intersection would operate at unacceptable LOS (LOS D and F).The intersection delays for the cumulative without project will range from 10.0 seconds to 294.0 seconds (4.9 minutes). The cumulative conditions with project scenario (addition of approximately 321 to 1501 cumulative trips), all intersections would operate at unacceptable LOS (LOS D to F), with the exception of the Riverside Drive and Neighbours Boulevard intersection during the p.m. peak hours will operate at an LOS B. The cumulative with project scenario will experience intersection delays ranging from 13.2 seconds to overflow conditions.

Of the four study intersections, Intersection 1 (Riverside Drive and Neighbours Boulevard) will receive the smallest increase in cumulative traffic (321 trips in the a.m. peak hour and 323 trips in the p.m. peak hour). North and south movements on Neighbours Boulevard are free flowing. East and Westbound movements on Riverside Avenue are stop controlled. It would operate at an acceptable LOS during the p.m. peak hour, because as illustrated in Figure 6.4, most of the traffic (approximately 303 vehicles) from Riverside Drive is headed southbound (right turn) onto Neighbours Boulevard. These vehicles will need to stop, but would experience minimal interruption from northbound (5 trips) and southbound (4 trips) vehicles on Neighbours Boulevard, and 8 vehicles from Riverside Drive will head southbound onto Neighbours Boulevard. Therefore, traffic during the p.m. peak hour will experience approximately 13.2 second delays. During the a.m. peak hour, Intersection 1 would experience greater delays, because most of the traffic (approximately 307 vehicles) from Neighbours Boulevard will make a left turn onto Riverside Drive. Westbound and eastbound vehicles on Riverside Drive are stop controlled and need to wait for large gaps to make a movement. This results in greater delays for the 10 vehicles from Riverside Drive headed southbound onto Neighbours Boulevard and 5 vehicles traveling eastbound on Riverside Drive. At stop controlled intersections, left turn movements are considered critical movements. When the free flowing movements, such as Neighbours Boulevard, have a very high volume the critical movements will experience longer delays in order to find a suitable gap in the traffic to make their turn. Therefore, these vehicles would experience delays approximately 40.1 seconds long and result in an LOS E (unacceptable level).

Intersection 3 (1-10 Eastbound Ramp and Neighbours Boulevard) would receive the highest cumulative trips of the four intersections. It would operate at LOS A during 2015 Conditions. With the addition of Project construction traffic (ranging from 172 to 367 trips), this intersection will reduce from an LOS A to LOS B with a 2.0-to-4.2 second delay increase. For the 2015 Cumulative without Project scenario (the addition of 929 trips in the a.m. and 1107 trips in the p.m.), the a.m. peak hour would increase from LOS A to LOS D with a 34.7-second delay; during the p.m. peak hour, it would increase from LOS A to LOS F with a 4.9-minute (294.0-second) delay. The 2015 Cumulative condition with Project construction (addition of 1253 trips in the a.m. and 1501 trips in the p.m.) would reduce from LOS B to LOS F and experience a 2.7-minute (163.9-second) delay during the a.m. peak hours and overflow conditions during the p.m. peak hours. The Project's cumulative contribution towards the 2015 Cumulative scenario would be approximately 25 percent during the a.m. and p.m. peak.

CHAPTER 8
DETERMINATION OF SIGNIFICANT IMPACTS AND MITIGATIONS

Traffic impacts are identified if the proposed project will result in a significant change in traffic conditions on a roadway or intersection. A significant impact is normally defined when project related traffic would cause level of service to deteriorate to below the minimum acceptable level by a measurable amount. Impacts may also be significant if the location is already below the minimum acceptable level and project related traffic causes a further decline.

The County of Riverside considers the following types of traffic impacts are to be "significant" under CEQA:

- When a project traffic is added to existing traffic (Project Completion), and results in deterioration of the LOS to below the target LOS, and impacts cannot be mitigated through project conditions of approval.
- When a project's cumulative traffic contribution exceeds the target LOS, and impacts cannot be mitigated through the TUMF network (or other funding mechanism), project conditions of approval, or other implementation mechanisms.

Project Construction Conditions Scenario Impacts

The 2015 Scenario with the addition ambient growth and project construction traffic does not cause a significant change in level of service when compared to the level of service experienced in the existing conditions (Year 2011); therefore, the project would not create significant impacts to the four study intersections.

Cumulative Conditions Scenario Impacts

Although very unlikely to occur, Chapter 6 describes the worst case scenario with the peak construction of multiple large energy projects and developments in the City of Blythe. As described in Chapter 7, during cumulative scenario without project (addition of approximately 149 to 1107 cumulative trips), during the a.m. peak hours, three intersections would operate at acceptable LOS levels (LOS B or C) and Intersection 3 (I-10 Eastbound Ramp and Neighbours Boulevard) would operate at an unacceptable LOS (LOS D). During the p.m. peak hours, two intersections would operate at acceptable LOS levels (LOS B and C) and two intersections would operate at LOS F.

As illustrated in the cumulative plus project scenarios (Tables 6-2, 6-3, and 7-1), the project would be a temporary cumulatively considerable contributor to traffic. The increased vehicle trips would result in increased traffic along the regional roadways analyzed and all four study intersections will operate at unacceptable LOS levels (LOS D to F), except Intersection 1 (Riverside Drive and Neighbours Boulevard) which would operate at an LOS B during the pm. peak hour.

As described in Chapter 6, in addition to the project, the major contributors to cumulative traffic impacts at the four study intersections are Rio Mesa Solar Electric Generating Facility, Desert Quartzite, and Palo Verde Mesa Solar Projects. The project would contribute approximately 20.2 to 53.6 percent of the cumulative trips. The Rio Mesa Solar Electric Generating will not contribute to cumulative traffic for Intersection 1, but will contribute approximately 13.9 to 40.4 percent of the cumulative traffic trips at intersections 2 through 4. Desert Quartzite will not contribute to cumulative impacts to Intersection 1, but will contribute approximately 11.0 to 32.3 percent of the cumulative impacts to intersections 2 through 4. The Palo Verde Mesa Solar Project will not contribute to cumulative impacts to intersection 4, but will contribute approximately 10.8 to 43.0 percent of the

cumulative impacts to intersections 1 through 3. Details for each projects contribution towards cumulative impacts is listed in Table 6-3.

Construction of multiple cumulative projects listed in Table 6-1A can occur simultaneously with the project, but it is unlikely that peak construction of all six solar projects will occur. The Rio Mesa Solar Electrical Generating Facility has been suspended and it is very unlikely that construction of this project and the proposed project will occur at the same time. It is anticipated that the Desert Quartzite project, which is similar in size and scope as the proposed project, will require the preparation of an environmental document. To date, the Desert Quartzite project has not issued a Notice of Intent or Notice of Preparation. After issuance of a notice, preparation of an environmental document may take approximately 12 to 18 months; therefore, peak construction of Desert Quartzite and project is very unlikely. In addition, the Blythe Solar Power Project has been suspended and peak construction will likely not occur at the same time as the project. Table 8-1 lists the potential cumulative trip reduction with the removal of the three solar projects.

Table 8-1
Potential Cumulative Trip Percentage Reduction

Intersection	Rio Mesa % Contribution	Blythe Solar % Contribution	Desert Quartzite % Contribution	TOTAL
AM Peak Hour				
1. Riverside Dr & Neighbours Blvd	0.0%	0.0%	0.0%	0.0 %
2. I-10 WB Ramp & Neighbours Blvd	13.9%	3.7%	11.1%	28.70%
3. I-10 EB Ramp & Neighbours Blvd	34.1%	1.2%	27.3%	62.60%
4. Seeley Ave & Neighbours Blvd	40.4%	1.4%	32.3%	74.10%
PM Peak Hour				
1. Riverside Dr & Neighbours Blvd	0.0%	0.0%	0.0%	0.0 %
2. I-10 WB Ramp & Neighbours Blvd	18.7%	3.6%	15.0%	37.30%
3. I-10 EB Ramp & Neighbours Blvd	25.4%	3.0%	20.4%	48.80%
4. Seeley Ave & Neighbours Blvd	38.9%	1.5%	31.2%	71.60%

Construction traffic would increase delays at intersections, which would impact public transit routes during a.m. and p.m. peak hours however, the with implementation of Traffic Mitigation Measure -1, the Project's contribution to cumulative impacts would be less than significant

Table 8-2 lists the anticipated trips, LOS, and delays of a cumulative scenario without the three solar projects mentioned above (Rio Mesa, Desert Quartzite, and Blythe Solar Power Project); this scenario takes into account the peak construction of the remaining projects. The table also illustrates the anticipated delays and LOS that would occur when 20, 30 and 40 percent, as well as none, of the remaining project trips are staggered to off-peak hours. If no trips were staggered, during the a.m. peak hour, two intersections will operate at LOS B and the other two will operate at an LOS D and E. During the p.m. peak hour, two intersections operate at an LOS B, one intersection operates at LOS C, and the remaining intersection will operate at an LOS F. If 25 percent of the remaining cumulative trips were staggered, all intersections would be operating at an acceptable LOS (LOS B or C), except Intersection 3 (I-10 Eastbound Ramp and Neighbours Boulevard) during the p.m. peak hour which would operate at an LOS E. Of the 768 cumulative trips, the project will contribute 376 trips (48.0 percent) and the Palo Verde Mesa Solar Project will contribute 295 trips (37.7 percent). The vehicles on Neighbours Boulevard turning left headed eastbound onto the 1-10 will experience greater delays, because of northbound vehicles on Neighbours Boulevard. The greatest delay will occur to vehicles coming off the 1-10 freeway headed northbound on Neighbours Boulevard. These vehicles are at stop controlled intersection, and left turn movements are considered critical movements; therefore, they will experience longer delays to find a suitable gap in the traffic to make their turn. In order for

Intersection 3 during the p.m. peak hours to operate at an acceptable LOS, approximately 40 percent of the cumulative traffic trips will need to be staggered to off-peak hours.

Appendix F contains the analysis worksheets for staggered scenarios.

Table 8-2
Cumulative Intersections Without Three Solar Projects and Staggered Trips

Intersection	Trips	Cumulative with Project without Rio Mesa, Desert Quartzite and Blythe Solar							
		0% Staggered Trips		25% Staggered Trips		30% Staggered Trips		40% Staggered Trips	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
AM Peak Hour									
1. Riverside Dr & Neighbours Blvd	321	E	40.1	C	22.9	C	20.7	C	17.6
2. I-10 WB Ramp & Neighbours Blvd	874	D	26.2	C	15.1	B	14.1	B	12.6
3. I-10 EB Ramp & Neighbours Blvd	469	B	14.6	B	12.5	B	12.1	B	11.5
4. Seeley Ave & Neighbours Blvd	274	B	10.6	B	10.3	B	10.2	B	10.1
PM Peak Hour									
1. Riverside Dr & Neighbours Blvd	323	B	13.2	B	11.5	B	11.2	B	10.7
2. I-10 WB Ramp & Neighbours Blvd	783	C	20.0	C	15.5	C	14.9	B	13.8
3. I-10 EB Ramp & Neighbours Blvd	768	F	126.5	E	37.2	D	30.8	C	23.4
4. Seeley Ave & Neighbours Blvd	278	B	13.1	B	12.0	B	11.8	B	11.4

Cumulative Impact Mitigation Measures

As described in above, the project will contribute to significant cumulative impacts at all four study intersections, except Intersection 1 during the a.m. peak hour. If the three solar projects are not constructed, the project will contribute significant cumulative impacts at Intersection 2 during the a.m. peak hour and Intersection 3 during the p.m. peak hour. With implementation of Traffic Mitigation Measures 1 through 3, the proposed project's temporary significant cumulative impacts from project construction will be minimized to less than significant levels.

Traffic Mitigation Measure-1

The Project owner will develop and implement a construction phase Traffic Management Plan (TMP) in consultation with Bureau of Land Management (BLM), Caltrans, County of Riverside, and City of Blythe for the roadway network potentially affected by construction activities at the Project site and offsite linear facilities. The Traffic Management Plan will include a plan to split the workforce and stagger arrival times during peak construction periods and a traffic LOS and queue monitoring program. Other approaches could be considered such as requiring contractors to arrange employee busing, park and ride, carpooling, etc. that achieve similar substantial reductions in peak hour traffic.

Traffic Mitigation Measure-2

The Project owner will conduct construction activities in accordance with Caltrans and other applicable limitations on vehicle sizes and weights, Construction Excavation Permits obtained from the Riverside County, Encroachment Permits from Caltrans, as well as permits and licenses from the California Highway Patrol and Caltrans for the transport of hazardous substances.

Traffic Mitigation Measure-3

The Project owner will coordinate with applicable traffic management agencies (e.g., Caltrans, Riverside County, and City of Blythe) as well as California Energy Commission (CEC) Compliance Project Manger (CPM) and BLM representative, and as appropriate and necessary, with other proponents of renewable energy project in the I-10 corridor, to address issues related to cumulative traffic associated with the possible concurrent construction of several large projects with large work forces for a few years beginning roughly in 2012.

With implementation of mitigation measures stated above, impacts to traffic and transportation would be minimized. Implementation of Traffic Mitigation Measure-1 (Traffic Management Plan) would reduce impacts from the proposed Project. Implementation of Mitigation Measure Traffic-3 (coordinate the construction traffic schedules from multiple large-scale generation projects) would further reduce the impacts to traffic and transportation.

Therefore, the Project's contribution show in Table 8.1 below towards temporary significant cumulative impacts during Project construction would be reduced at the four intersections to less than significant levels.

Operation and Maintenance

The operational project impacts are expected to be nominal (12 permanent full-time employees). Based on this analysis, the project construction and project itself are not expected to have long term significant traffic impacts on the transportation network. Construction related impacts are considered temporary during construction phases and LOS will be restored back to preconstruction conditions once the construction phase is completed. No road closures are anticipated for the Project; however, Seeley Avenue and Riverside Drive would be improved for emergency vehicle access.

Decommissioning

Decommissioning impacts from the Project would have similar impacts as construction. It is very unlikely that decommissioning of all cumulative projects would occur at the same time; however, it is assumed that decommissioning impacts from the cumulative projects would be similar to construction, but would be less intense and of a shorter duration. Therefore, the Project would not result in cumulatively considerable significant impacts.

Residual Impacts After Mitigation

With implementation of the Traffic Mitigation Measures-1 through-3, impacts to traffic would be reduced to a less than significant level.

References

California Energy Commission large Solar Energy Projects

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Available at: http://www.sanbag.ca.gov/planning/cmp/cmp_app-c_02-09.pdf

Prepared By:

KOA Corporation

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Supporting Staff:	Roger Pelayo, Assistant Transportation Planner

APPENDIX A
TRAFFIC COUNT DATA

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

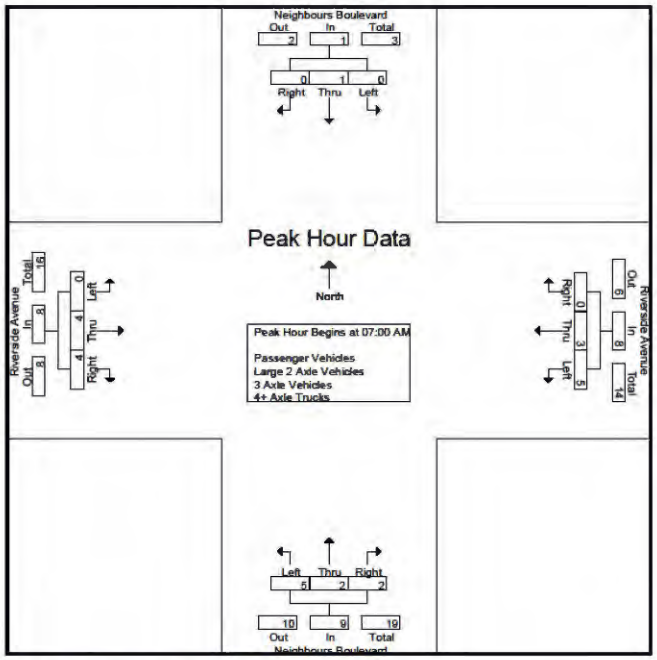
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	1	1	5
07:15 AM	0	0	0	0	2	0	0	2	1	1	1	3	0	1	0	1	6
07:30 AM	0	0	0	0	0	2	0	2	3	1	1	5	0	2	2	4	11
07:45 AM	0	0	0	0	1	0	0	1	1	0	0	1	0	1	1	2	4
Total	0	1	0	1	5	3	0	8	5	2	2	9	0	4	4	8	26
08:00 AM	0	0	0	0	1	0	0	1	1	0	1	2	0	0	0	0	3
08:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	1	2	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	2	0	0	2	1	0	2	3	0	1	2	3	9
Grand Total	0	2	0	2	7	3	0	10	6	2	4	12	0	5	6	11	35
Apprch %	0	100	0		70	30	0		50	16.7	33.3		0	45.5	54.5		
Total %	0	5.7	0	5.7	20	8.6	0	28.6	17.1	5.7	11.4	34.3	0	14.3	17.1	31.4	
Passenger Vehicles	0	2	0	2	7	2	0	9	4	2	3	9	0	4	4	8	28
% Passenger Vehicles	0	100	0	100	100	66.7	0	90	66.7	100	75	75	0	80	66.7	72.7	80
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	2	4
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	33.3	0	0	16.7	0	20	16.7	18.2	11.4
3 Axle Vehicles	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
% 3 Axle Vehicles	0	0	0	0	0	33.3	0	10	0	0	25	8.3	0	0	16.7	9.1	8.6
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	1	1	5
07:15 AM	0	0	0	0	2	0	0	2	1	1	1	3	0	1	0	1	6
07:30 AM	0	0	0	0	0	2	0	2	3	1	1	5	0	2	2	4	11
07:45 AM	0	0	0	0	1	0	0	1	1	0	0	1	0	1	1	2	4
Total Volume	0	1	0	1	5	3	0	8	5	2	2	9	0	4	4	8	26
% App. Total	0	100	0		62.5	37.5	0		55.6	22.2	22.2		0	50	50		
PHF	.000	.250	.000	.250	.625	.375	.000	.667	.417	.500	.500	.450	.000	.500	.500	.500	.591

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	0	1	0	1	2	1	0	3	1	1	1	3	0	0	1	1
+15 mins.	0	0	0	0	2	0	0	2	3	1	1	5	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	2	2	4
+45 mins.	0	0	0	0	1	0	0	1	1	0	1	2	0	1	1	2
Total Volume	0	1	0	1	5	3	0	8	6	2	3	11	0	4	4	8
% App. Total	0	100	0		62.5	37.5	0		54.5	18.2	27.3		0	50	50	
PHF	.000	.250	.000	.250	.625	.375	.000	.667	.500	.500	.750	.550	.000	.500	.500	.500

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
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File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

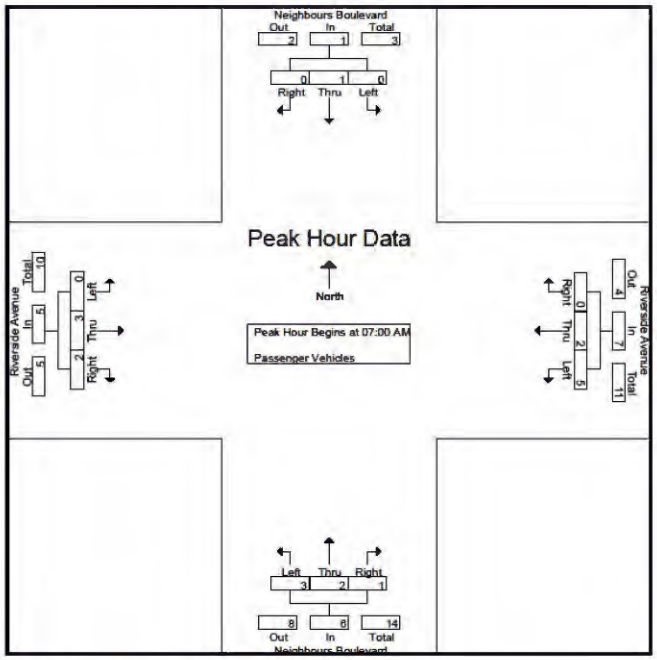
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	1	1	5
07:15 AM	0	0	0	0	2	0	0	2	1	1	0	2	0	1	0	1	5
07:30 AM	0	0	0	0	0	1	0	1	2	1	1	4	0	1	0	1	6
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	2	3
Total	0	1	0	1	5	2	0	7	3	2	1	6	0	3	2	5	19
08:00 AM	0	0	0	0	1	0	0	1	1	0	1	2	0	0	0	0	3
08:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	1	1	2	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	2	0	0	2	1	0	2	3	0	1	2	3	9
Grand Total	0	2	0	2	7	2	0	9	4	2	3	9	0	4	4	8	28
Apprch %	0	100	0		77.8	22.2	0		44.4	22.2	33.3		0	50	50		
Total %	0	7.1	0	7.1	25	7.1	0	32.1	14.3	7.1	10.7	32.1	0	14.3	14.3	28.6	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	0	1	2	1	0	3	0	0	0	0	0	0	1	1	5
07:15 AM	0	0	0	0	2	0	0	2	1	1	0	2	0	1	0	1	5
07:30 AM	0	0	0	0	0	1	0	1	2	1	1	4	0	1	0	1	6
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	2	3
Total Volume	0	1	0	1	5	2	0	7	3	2	1	6	0	3	2	5	19
% App. Total	0	100	0		71.4	28.6	0		50	33.3	16.7		0	60	40		
PHF	.000	.250	.000	.250	.625	.500	.000	.583	.375	.500	.250	.375	.000	.750	.500	.625	.792

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	1	0	1	2	1	0	3	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	2	0	0	2	1	1	0	2	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	2	1	1	4	0	1	0	1
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	2
Total Volume	0	1	0	1	5	2	0	7	3	2	1	6	0	3	2	5
% App. Total	0	100	0		71.4	28.6	0		50	33.3	16.7		0	60	40	
PHF	.000	.250	.000	.250	.625	.500	.000	.583	.375	.500	.250	.375	.000	.750	.500	.625

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

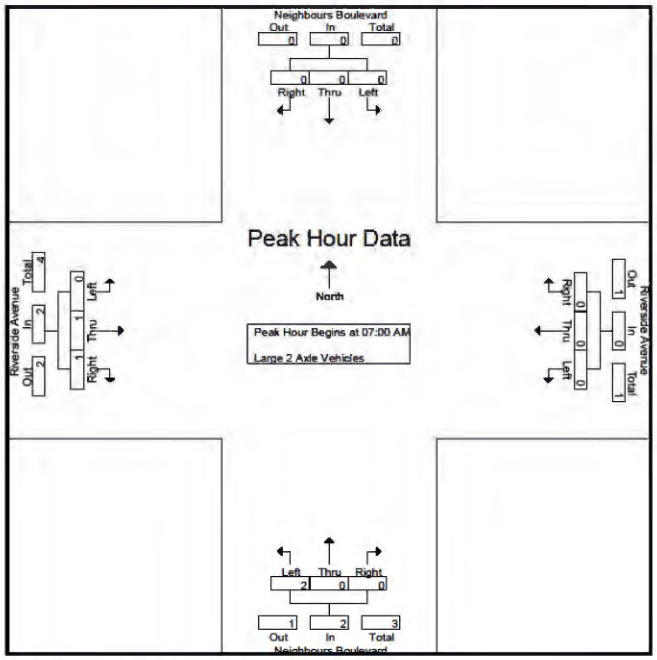
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2	3
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	2	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	2	4
Apprch %	0	0	0		0	0	0		100	0	0		0	50	50		
Total %	0	0	0	0	0	0	0	0	50	0	0	50	0	25	25	50	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2	3
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	2	4
% App. Total	0	0	0		0	0	0		100	0	0		0	50	50		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.000	.250	.250	.250	.333

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PO Box 1178
Corona, CA 92878
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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2
+45 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	2
% App. Total	0	0	0		0	0	0		100	0	0		0	50	50	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.500	.000	.000	.500	.000	.250	.250	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

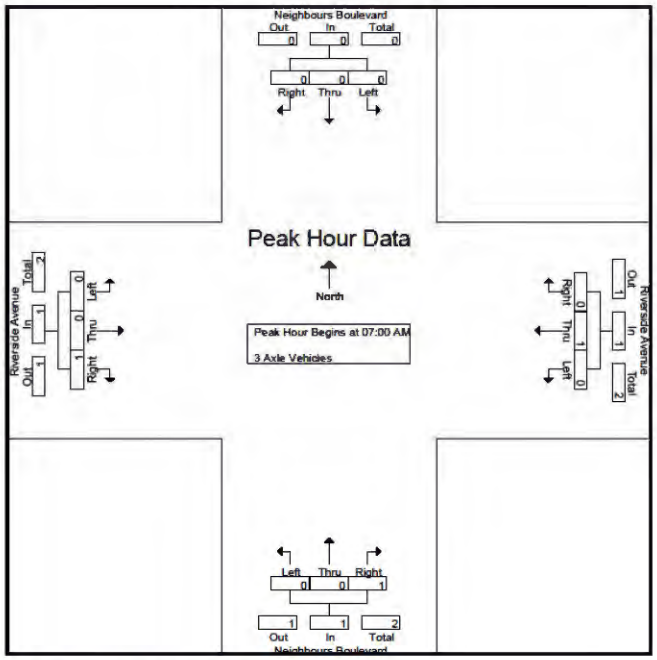
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
Apprch %	0	0	0		0	100	0		0	0	100		0	0	100		
Total %	0	0	0	0	0	33.3	0	33.3	0	0	33.3	33.3	0	0	33.3	33.3	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
% App. Total	0	0	0		0	100	0		0	0	100		0	0	100		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250	.000	.000	.250	.250	.375

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1
% App. Total	0	0	0		0	100	0		0	0	100		0	0	100	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.250	.250	.000	.000	.250	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

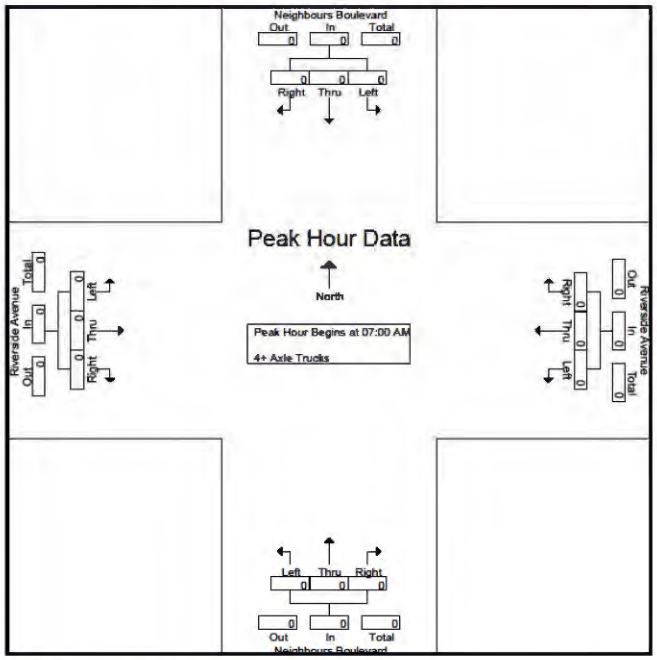
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

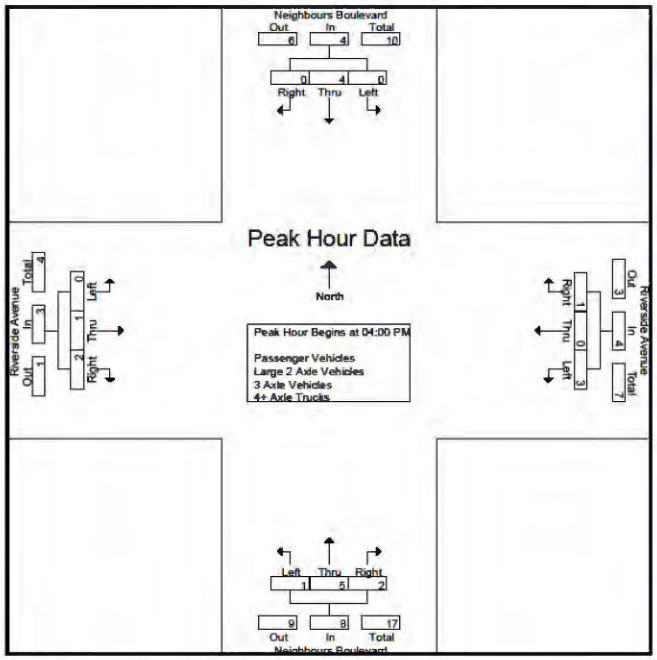
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1	5
04:15 PM	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1	7
04:30 PM	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3	19
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:30 PM	0	2	0	2	0	1	0	1	1	1	0	2	0	0	1	1	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	2	0	2	1	1	1	3	0	0	3	3	11
Grand Total	0	7	0	7	3	2	1	6	2	6	3	11	0	1	5	6	30
Apprch %	0	100	0		50	33.3	16.7		18.2	54.5	27.3		0	16.7	83.3		
Total %	0	23.3	0	23.3	10	6.7	3.3	20	6.7	20	10	36.7	0	3.3	16.7	20	
Passenger Vehicles	0	7	0	7	3	2	1	6	2	6	3	11	0	1	5	6	30
% Passenger Vehicles	0	100	0	100	100	100	100	100	100	100	100	100	0	100	100	100	100
Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Large 2 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1	5
04:15 PM	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1	7
04:30 PM	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3	19
% App. Total	0	100	0		75	0	25		12.5	62.5	25		0	33.3	66.7		
PHF	.000	.333	.000	.333	.375	.000	.250	.500	.250	.417	.500	.667	.000	.250	.500	.750	.679

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1
+15 mins.	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1
+30 mins.	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3
% App. Total	0	100	0		75	0	25		12.5	62.5	25		0	33.3	66.7	
PHF	.000	.333	.000	.333	.375	.000	.250	.500	.250	.417	.500	.667	.000	.250	.500	.750

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

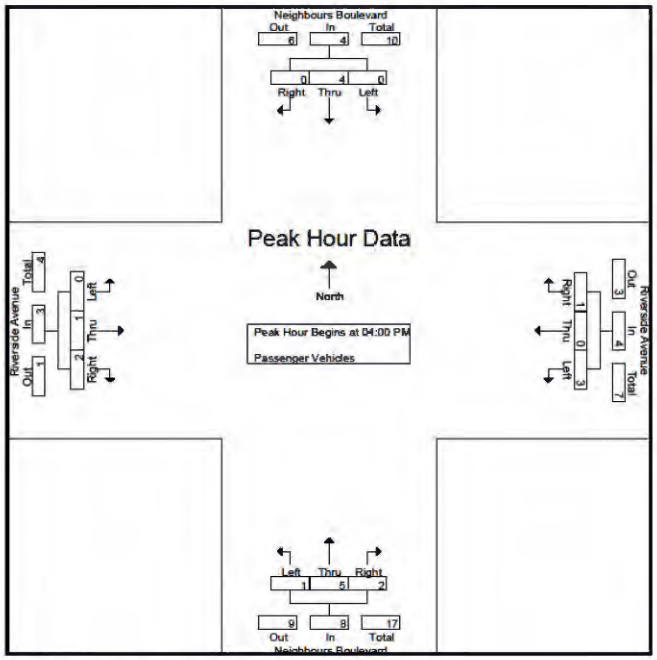
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1	5
04:15 PM	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1	7
04:30 PM	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3	19
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
05:15 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:30 PM	0	2	0	2	0	1	0	1	1	1	0	2	0	0	1	1	6
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	2	0	2	1	1	1	3	0	0	3	3	11
Grand Total	0	7	0	7	3	2	1	6	2	6	3	11	0	1	5	6	30
Apprch %	0	100	0		50	33.3	16.7		18.2	54.5	27.3		0	16.7	83.3		
Total %	0	23.3	0	23.3	10	6.7	3.3	20	6.7	20	10	36.7	0	3.3	16.7	20	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1	5
04:15 PM	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1	7
04:30 PM	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1	6
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Volume	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3	19
% App. Total	0	100	0		75	0	25		12.5	62.5	25		0	33.3	66.7		
PHF	.000	.333	.000	.333	.375	.000	.250	.500	.250	.417	.500	.667	.000	.250	.500	.750	.679

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	1	0	0	1	0	1	1	2	0	0	1	1
+15 mins.	0	3	0	3	0	0	1	1	1	1	0	2	0	0	1	1
+30 mins.	0	0	0	0	2	0	0	2	0	3	0	3	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	4	0	4	3	0	1	4	1	5	2	8	0	1	2	3
% App. Total	0	100	0		75	0	25		12.5	62.5	25		0	33.3	66.7	
PHF	.000	.333	.000	.333	.375	.000	.250	.500	.250	.417	.500	.667	.000	.250	.500	.750

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

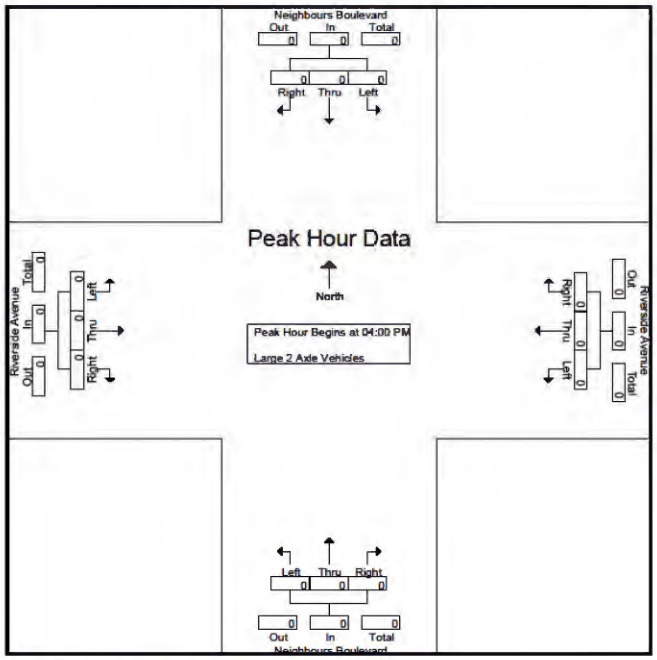
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
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File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

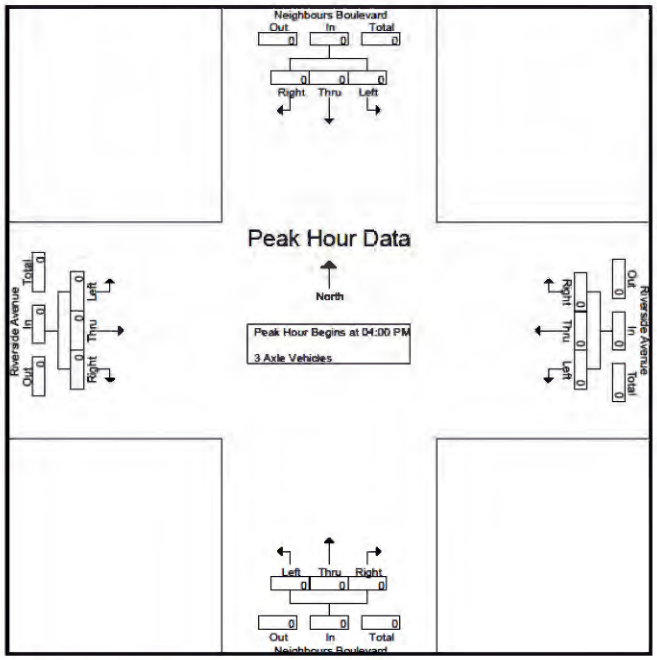
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
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File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Riverside Avenue
Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

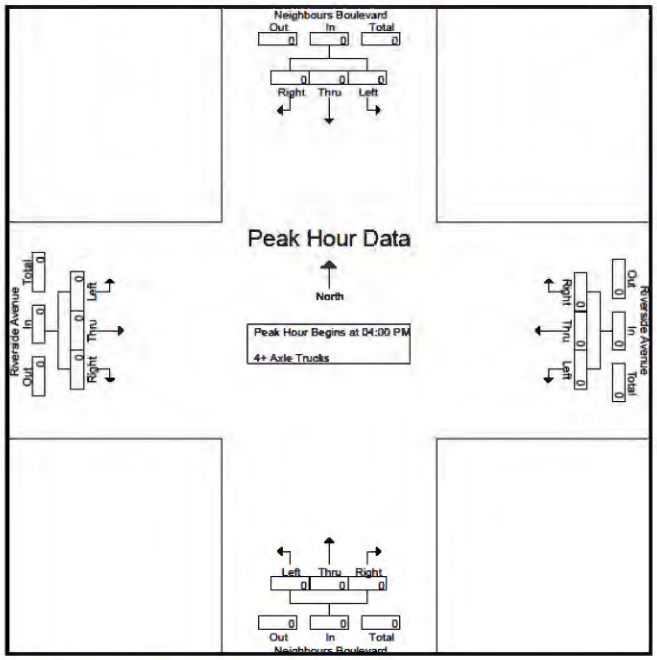
	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0		
Total %																	

	Neighbours Boulevard Southbound				Riverside Avenue Westbound				Neighbours Boulevard Northbound				Riverside Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
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Weather: Sunny

File Name : CRVNERIPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	1	0	2	1	0	0	0	0	0	0	1
07:15 AM	0	0	0	2	0	0	1	1	0	0	1	0
07:30 AM	0	0	0	0	1	0	2	1	1	0	1	0
07:45 AM	0	0	0	1	0	0	0	0	0	0	1	1
08:00 AM	0	0	0	1	0	0	1	0	1	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	1	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:00 AM	0	1	0	5	2	0	3	2	1	0	3	2

SUMMARY WITH PCE

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour 07:00 AM	0	1	0	5	4	0	6	2	3	0	5	6

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	1	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	1	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:00 AM	0	0	0	0	0	0	2	0	0	0	1	1
PCE 1.5	0	0	0	0	0	0	3	0	0	0	2	2

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	0
07:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:00 AM	0	0	0	0	1	0	0	0	1	0	0	1
PCE 2.0	0	0	0	0	2	0	0	0	2	0	0	2

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
PCE 3.0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	1	0	1	0	0	0	1	1	0	0	1
04:15 PM	0	3	0	0	0	1	1	1	0	0	0	1
04:30 PM	0	0	0	2	0	0	0	3	0	0	1	0
04:45 PM	0	0	0	0	0	0	0	0	1	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	0	0	0	0	0	1	0	0	0
05:30 PM	0	2	0	0	1	0	1	1	0	0	0	1
05:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	4	0	3	0	1	1	5	2	0	1	2

SUMMARY WITH PCE

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour 04:00 PM	0	4	0	3	0	1	1	5	2	0	1	2

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
PCE 1.5	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
PCE 2.0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNERIPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Riverside Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Riverside Avenue Westbound			Neighbours Boulevard Northbound			Riverside Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
PCE 3.0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

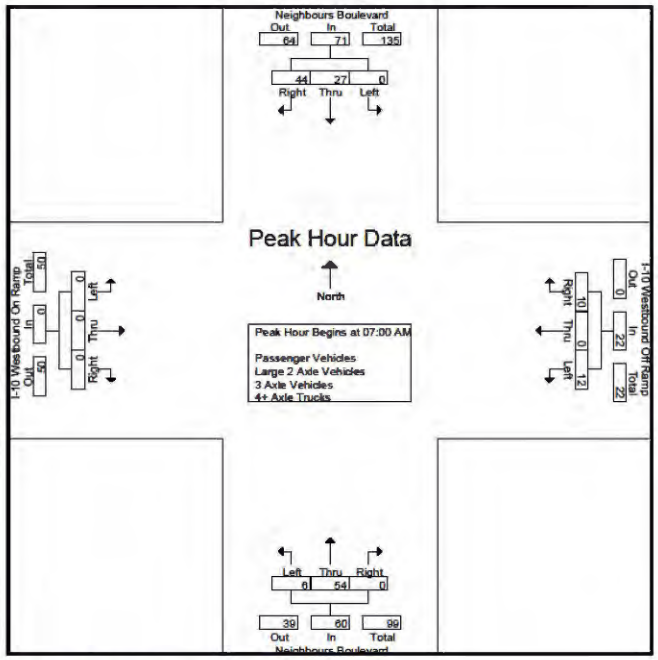
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	8	14	2	0	3	5	0	14	0	14	0	0	0	0	33
07:15 AM	0	8	16	24	2	0	3	5	1	13	0	14	0	0	0	0	43
07:30 AM	0	9	14	23	3	0	3	6	5	15	0	20	0	0	0	0	49
07:45 AM	0	4	6	10	5	0	1	6	0	12	0	12	0	0	0	0	28
Total	0	27	44	71	12	0	10	22	6	54	0	60	0	0	0	0	153
08:00 AM	0	5	7	12	7	2	1	10	0	5	0	5	0	0	0	0	27
08:15 AM	0	8	3	11	7	0	2	9	7	5	0	12	0	0	0	0	32
08:30 AM	0	9	1	10	6	0	1	7	0	8	0	8	0	0	0	0	25
08:45 AM	0	6	1	7	2	0	1	3	2	9	0	11	0	0	0	0	21
Total	0	28	12	40	22	2	5	29	9	27	0	36	0	0	0	0	105
Grand Total	0	55	56	111	34	2	15	51	15	81	0	96	0	0	0	0	258
Apprch %	0	49.5	50.5		66.7	3.9	29.4		15.6	84.4	0		0	0	0		
Total %	0	21.3	21.7	43	13.2	0.8	5.8	19.8	5.8	31.4	0	37.2	0	0	0	0	
Passenger Vehicles	0	48	50	98	26	1	12	39	6	74	0	80	0	0	0	0	217
% Passenger Vehicles	0	87.3	89.3	88.3	76.5	50	80	76.5	40	91.4	0	83.3	0	0	0	0	84.1
Large 2 Axle Vehicles	0	3	4	7	3	0	2	5	2	1	0	3	0	0	0	0	15
% Large 2 Axle Vehicles	0	5.5	7.1	6.3	8.8	0	13.3	9.8	13.3	1.2	0	3.1	0	0	0	0	5.8
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% 3 Axle Vehicles	0	1.8	0	0.9	0	0	0	0	0	2.5	0	2.1	0	0	0	0	1.2
4+ Axle Trucks	0	3	2	5	5	1	1	7	7	4	0	11	0	0	0	0	23
% 4+ Axle Trucks	0	5.5	3.6	4.5	14.7	50	6.7	13.7	46.7	4.9	0	11.5	0	0	0	0	8.9

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	6	8	14	2	0	3	5	0	14	0	14	0	0	0	0	33
07:15 AM	0	8	**16**	**24**	2	0	3	5	1	13	0	14	0	0	0	0	43
07:30 AM	0	**9**	14	23	3	0	3	**6**	**5**	**15**	0	**20**	0	0	0	0	**49**
07:45 AM	0	4	6	10	**5**	0	1	6	0	12	0	12	0	0	0	0	28
Total Volume	0	27	44	71	12	0	10	22	6	54	0	60	0	0	0	0	153
% App. Total	0	38	62		54.5	0	45.5		10	90	0		0	0	0		
PHF	.000	.750	.688	.740	.600	.000	.833	.917	.300	.900	.000	.750	.000	.000	.000	.000	.781

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:00 AM				07:00 AM			
+0 mins.	0	6	8	14	5	0	1	6	0	14	0	14	0	0	0	0
+15 mins.	0	8	16	24	7	2	1	10	1	13	0	14	0	0	0	0
+30 mins.	0	9	14	23	7	0	2	9	5	15	0	20	0	0	0	0
+45 mins.	0	4	6	10	6	0	1	7	0	12	0	12	0	0	0	0
Total Volume	0	27	44	71	25	2	5	32	6	54	0	60	0	0	0	0
% App. Total	0	38	62		78.1	6.2	15.6		10	90	0		0	0	0	
PHF	.000	.750	.688	.740	.893	.250	.625	.800	.300	.900	.000	.750	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

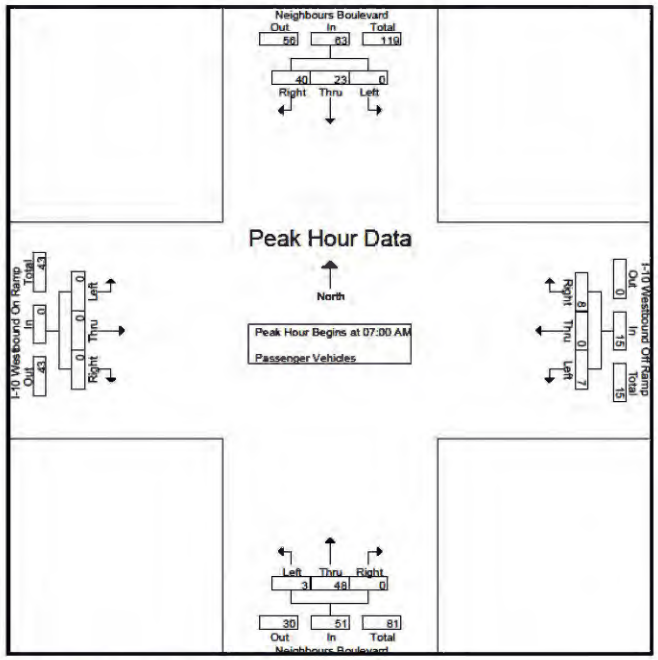
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	8	14	2	0	2	4	0	12	0	12	0	0	0	0	30
07:15 AM	0	6	13	19	1	0	2	3	1	11	0	12	0	0	0	0	34
07:30 AM	0	7	14	21	2	0	3	5	2	14	0	16	0	0	0	0	42
07:45 AM	0	4	5	9	2	0	1	3	0	11	0	11	0	0	0	0	23
Total	0	23	40	63	7	0	8	15	3	48	0	51	0	0	0	0	129
08:00 AM	0	5	7	12	5	1	1	7	0	5	0	5	0	0	0	0	24
08:15 AM	0	7	2	9	7	0	1	8	3	5	0	8	0	0	0	0	25
08:30 AM	0	8	1	9	6	0	1	7	0	8	0	8	0	0	0	0	24
08:45 AM	0	5	0	5	1	0	1	2	0	8	0	8	0	0	0	0	15
Total	0	25	10	35	19	1	4	24	3	26	0	29	0	0	0	0	88
Grand Total	0	48	50	98	26	1	12	39	6	74	0	80	0	0	0	0	217
Apprch %	0	49	51		66.7	2.6	30.8		7.5	92.5	0		0	0	0		
Total %	0	22.1	23	45.2	12	0.5	5.5	18	2.8	34.1	0	36.9	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	6	8	14	2	0	2	4	0	12	0	12	0	0	0	0	30
07:15 AM	0	6	13	19	1	0	2	3	1	11	0	12	0	0	0	0	34
07:30 AM	0	7	14	21	2	0	3	5	2	14	0	16	0	0	0	0	42
07:45 AM	0	4	5	9	2	0	1	3	0	11	0	11	0	0	0	0	23
Total Volume	0	23	40	63	7	0	8	15	3	48	0	51	0	0	0	0	129
% App. Total	0	36.5	63.5		46.7	0	53.3		5.9	94.1	0		0	0	0		
PHF	.000	.821	.714	.750	.875	.000	.667	.750	.375	.857	.000	.797	.000	.000	.000	.000	.768

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	6	8	14	2	0	2	4	0	12	0	12	0	0	0	0
+15 mins.	0	6	13	19	1	0	2	3	1	11	0	12	0	0	0	0
+30 mins.	0	7	14	21	2	0	3	5	2	14	0	16	0	0	0	0
+45 mins.	0	4	5	9	2	0	1	3	0	11	0	11	0	0	0	0
Total Volume	0	23	40	63	7	0	8	15	3	48	0	51	0	0	0	0
% App. Total	0	36.5	63.5		46.7	0	53.3		5.9	94.1	0		0	0	0	
PHF	.000	.821	.714	.750	.875	.000	.667	.750	.375	.857	.000	.797	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

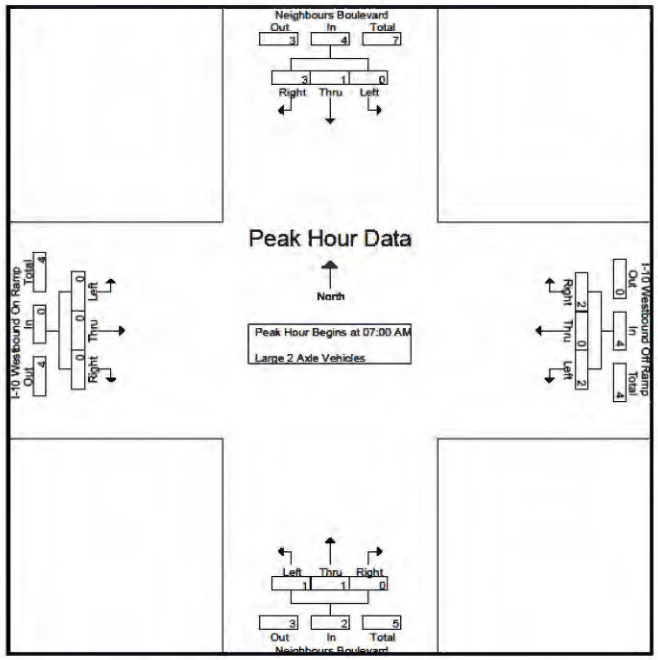
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
07:15 AM	0	1	3	4	1	0	1	2	0	0	0	0	0	0	0	0	6
07:30 AM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	3	4	2	0	2	4	1	1	0	2	0	0	0	0	10
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	2	0	0	0	0	1	0	0	1	0	0	0	0	3
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	2	1	3	1	0	0	1	1	0	0	1	0	0	0	0	5
Grand Total	0	3	4	7	3	0	2	5	2	1	0	3	0	0	0	0	15
Apprch %	0	42.9	57.1		60	0	40		66.7	33.3	0		0	0	0		
Total %	0	20	26.7	46.7	20	0	13.3	33.3	13.3	6.7	0	20	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
07:15 AM	0	1	3	4	1	0	1	2	0	0	0	0	0	0	0	0	6
07:30 AM	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	3	4	2	0	2	4	1	1	0	2	0	0	0	0	10
% App. Total	0	25	75		50	0	50		50	50	0		0	0	0		
PHF	.000	.250	.250	.250	.500	.000	.500	.500	.250	.250	.000	.500	.000	.000	.000	.000	.417

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0
+15 mins.	0	1	3	4	1	0	1	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	3	4	2	0	2	4	1	1	0	2	0	0	0	0
% App. Total	0	25	75		50	0	50		50	50	0		0	0	0	
PHF	.000	.250	.250	.250	.500	.000	.500	.500	.250	.250	.000	.500	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

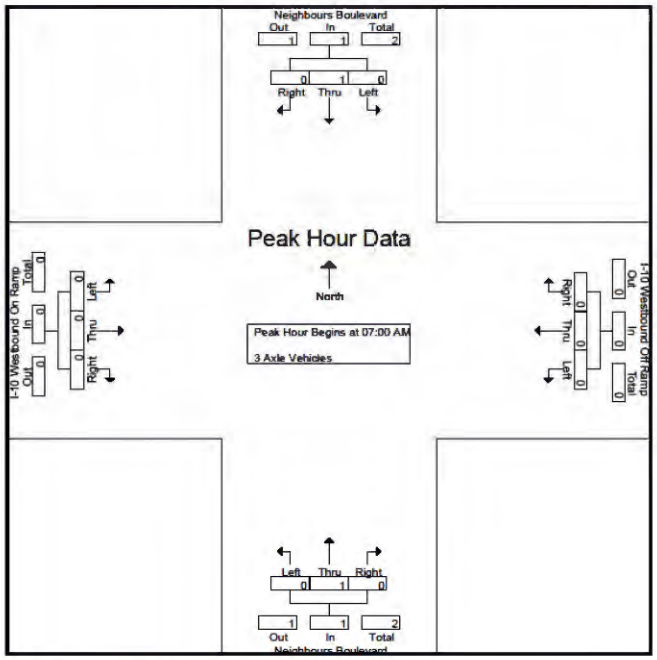
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Grand Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	33.3	0	33.3	0	0	0	0	0	66.7	0	66.7	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.500

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PO Box 1178
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

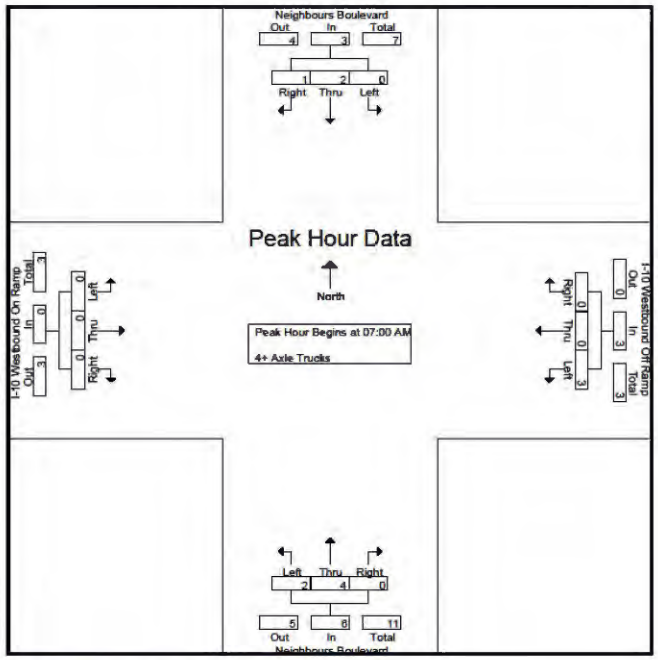
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	2	1	0	3	0	0	0	0	4
07:45 AM	0	0	1	1	3	0	0	3	0	1	0	1	0	0	0	0	5
Total	0	2	1	3	3	0	0	3	2	4	0	6	0	0	0	0	12
08:00 AM	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	1	1	3	0	0	3	0	0	0	0	4
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	2	0	0	0	0	2	0	0	2	0	0	0	0	4
Total	0	1	1	2	2	1	1	4	5	0	0	5	0	0	0	0	11
Grand Total	0	3	2	5	5	1	1	7	7	4	0	11	0	0	0	0	23
Apprch %	0	60	40		71.4	14.3	14.3		63.6	36.4	0		0	0	0		
Total %	0	13	8.7	21.7	21.7	4.3	4.3	30.4	30.4	17.4	0	47.8	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	0	1	0	1	0	0	0	0	2	1	0	3	0	0	0	0	4
07:45 AM	0	0	1	1	3	0	0	3	0	1	0	1	0	0	0	0	5
Total Volume	0	2	1	3	3	0	0	3	2	4	0	6	0	0	0	0	12
% App. Total	0	66.7	33.3		100	0	0		33.3	66.7	0		0	0	0		
PHF	.000	.500	.250	.750	.250	.000	.000	.250	.250	1.000	.000	.500	.000	.000	.000	.000	.600

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	2	1	0	3	0	0	0	0
+45 mins.	0	0	1	1	3	0	0	3	0	1	0	1	0	0	0	0
Total Volume	0	2	1	3	3	0	0	3	2	4	0	6	0	0	0	0
% App. Total	0	66.7	33.3		100	0	0		33.3	66.7	0		0	0	0	
PHF	.000	.500	.250	.750	.250	.000	.000	.250	.250	1.000	.000	.500	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
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Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

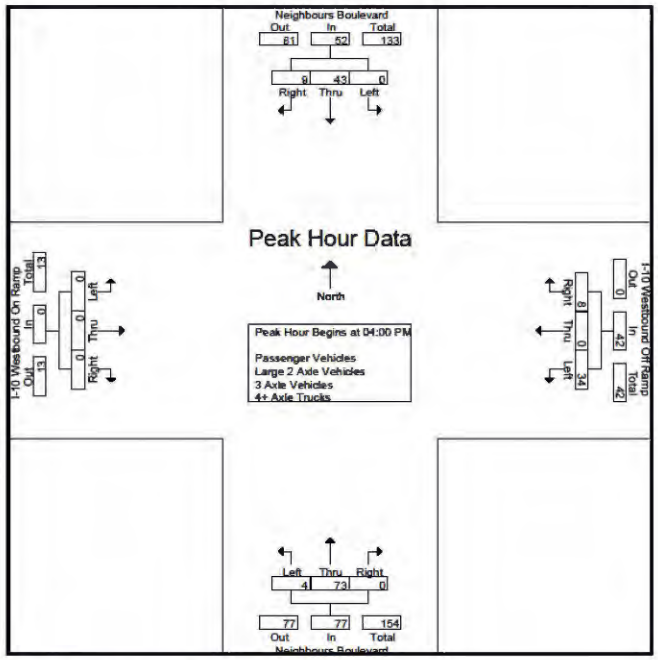
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	11	1	12	11	0	1	12	0	18	0	18	0	0	0	0	42
04:15 PM	0	8	5	13	9	0	3	12	3	23	0	26	0	0	0	0	51
04:30 PM	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0	38
04:45 PM	0	14	2	16	8	0	2	10	1	13	0	14	0	0	0	0	40
Total	0	43	9	52	34	0	8	42	4	73	0	77	0	0	0	0	171
05:00 PM	0	12	0	12	15	0	1	16	0	8	0	8	0	0	0	0	36
05:15 PM	0	10	0	10	6	0	3	9	0	13	0	13	0	0	0	0	32
05:30 PM	0	3	3	6	13	0	3	16	0	10	0	10	0	0	0	0	32
05:45 PM	0	6	1	7	4	0	2	6	0	9	0	9	0	0	0	0	22
Total	0	31	4	35	38	0	9	47	0	40	0	40	0	0	0	0	122
Grand Total	0	74	13	87	72	0	17	89	4	113	0	117	0	0	0	0	293
Apprch %	0	85.1	14.9		80.9	0	19.1		3.4	96.6	0		0	0	0		
Total %	0	25.3	4.4	29.7	24.6	0	5.8	30.4	1.4	38.6	0	39.9	0	0	0	0	
Passenger Vehicles	0	71	12	83	54	0	16	70	3	108	0	111	0	0	0	0	264
% Passenger Vehicles	0	95.9	92.3	95.4	75	0	94.1	78.7	75	95.6	0	94.9	0	0	0	0	90.1
Large 2 Axle Vehicles	0	1	1	2	3	0	0	3	0	2	0	2	0	0	0	0	7
% Large 2 Axle Vehicles	0	1.4	7.7	2.3	4.2	0	0	3.4	0	1.8	0	1.7	0	0	0	0	2.4
3 Axle Vehicles	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
% 3 Axle Vehicles	0	0	0	0	1.4	0	0	1.1	0	0	0	0	0	0	0	0	0.3
4+ Axle Trucks	0	2	0	2	14	0	1	15	1	3	0	4	0	0	0	0	21
% 4+ Axle Trucks	0	2.7	0	2.3	19.4	0	5.9	16.9	25	2.7	0	3.4	0	0	0	0	7.2

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	11	1	12	11	0	1	12	0	18	0	18	0	0	0	0	42
04:15 PM	0	8	5	13	9	0	3	12	3	23	0	26	0	0	0	0	51
04:30 PM	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0	38
04:45 PM	0	14	2	16	8	0	2	10	1	13	0	14	0	0	0	0	40
Total Volume	0	43	9	52	34	0	8	42	4	73	0	77	0	0	0	0	171
% App. Total	0	82.7	17.3		81	0	19		5.2	94.8	0		0	0	0		
PHF	.000	.768	.450	.813	.773	.000	.667	.875	.333	.793	.000	.740	.000	.000	.000	.000	.838

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	11	1	12	11	0	1	12	0	18	0	18	0	0	0	0
+15 mins.	0	8	5	13	9	0	3	12	3	23	0	26	0	0	0	0
+30 mins.	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0
+45 mins.	0	14	2	16	8	0	2	10	1	13	0	14	0	0	0	0
Total Volume	0	43	9	52	34	0	8	42	4	73	0	77	0	0	0	0
% App. Total	0	82.7	17.3		81	0	19		5.2	94.8	0		0	0	0	
PHF	.000	.768	.450	.813	.773	.000	.667	.875	.333	.793	.000	.740	.000	.000	.000	.000

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File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

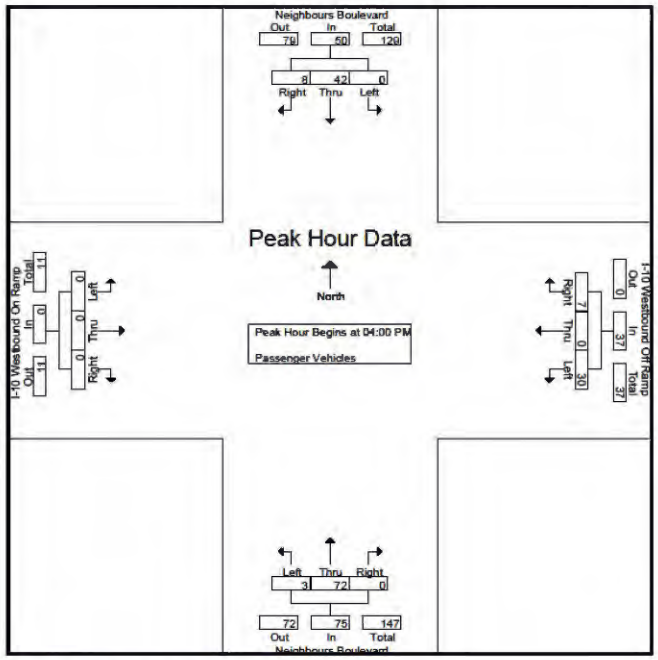
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	11	1	12	9	0	0	9	0	18	0	18	0	0	0	0	39
04:15 PM	0	8	5	13	9	0	3	12	2	23	0	25	0	0	0	0	50
04:30 PM	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0	38
04:45 PM	0	13	1	14	6	0	2	8	1	12	0	13	0	0	0	0	35
Total	0	42	8	50	30	0	7	37	3	72	0	75	0	0	0	0	162
05:00 PM	0	12	0	12	9	0	1	10	0	8	0	8	0	0	0	0	30
05:15 PM	0	8	0	8	4	0	3	7	0	13	0	13	0	0	0	0	28
05:30 PM	0	3	3	6	8	0	3	11	0	6	0	6	0	0	0	0	23
05:45 PM	0	6	1	7	3	0	2	5	0	9	0	9	0	0	0	0	21
Total	0	29	4	33	24	0	9	33	0	36	0	36	0	0	0	0	102
Grand Total	0	71	12	83	54	0	16	70	3	108	0	111	0	0	0	0	264
Apprch %	0	85.5	14.5		77.1	0	22.9		2.7	97.3	0		0	0	0		
Total %	0	26.9	4.5	31.4	20.5	0	6.1	26.5	1.1	40.9	0	42	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	11	1	12	9	0	0	9	0	18	0	18	0	0	0	0	39
04:15 PM	0	8	5	13	9	0	3	12	2	23	0	25	0	0	0	0	50
04:30 PM	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0	38
04:45 PM	0	13	1	14	6	0	2	8	1	12	0	13	0	0	0	0	35
Total Volume	0	42	8	50	30	0	7	37	3	72	0	75	0	0	0	0	162
% App. Total	0	84	16		81.1	0	18.9		4	96	0		0	0	0		
PHF	.000	.808	.400	.893	.833	.000	.583	.771	.375	.783	.000	.750	.000	.000	.000	.000	.810

Counts Unlimited Inc.
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County of Riverside
N/S: Neighbours Boulevard
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Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	11	1	12	9	0	0	9	0	18	0	18	0	0	0	0
+15 mins.	0	8	5	13	9	0	3	12	2	23	0	25	0	0	0	0
+30 mins.	0	10	1	11	6	0	2	8	0	19	0	19	0	0	0	0
+45 mins.	0	13	1	14	6	0	2	8	1	12	0	13	0	0	0	0
Total Volume	0	42	8	50	30	0	7	37	3	72	0	75	0	0	0	0
% App. Total	0	84	16		81.1	0	18.9		4	96	0		0	0	0	
PHF	.000	.808	.400	.893	.833	.000	.583	.771	.375	.783	.000	.750	.000	.000	.000	.000

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County of Riverside
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File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

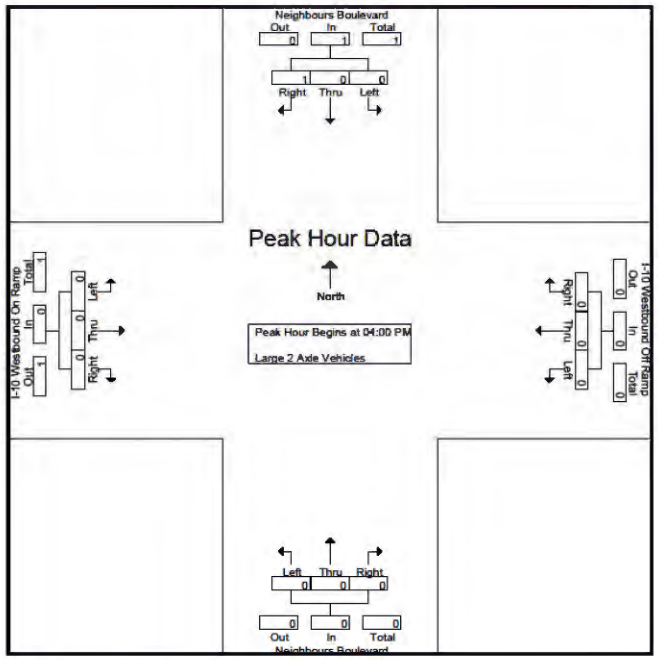
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
05:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	1	0	1	3	0	0	3	0	2	0	2	0	0	0	0	6
Grand Total	0	1	1	2	3	0	0	3	0	2	0	2	0	0	0	0	7
Apprch %	0	50	50		100	0	0		0	100	0		0	0	0		
Total %	0	14.3	14.3	28.6	42.9	0	0	42.9	0	28.6	0	28.6	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	100		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

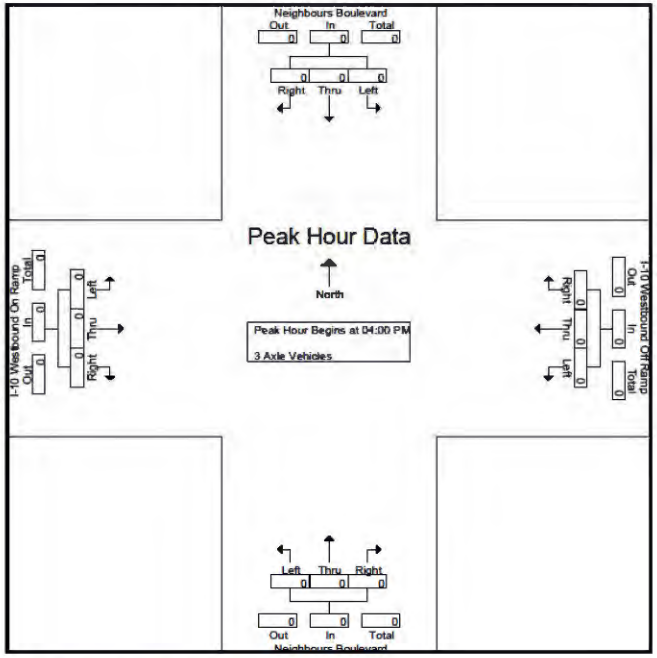
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Apprch %	0	0	0		100	0	0		0	0	0		0	0	0		
Total %	0	0	0	0	100	0	0	100	0	0	0	0	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

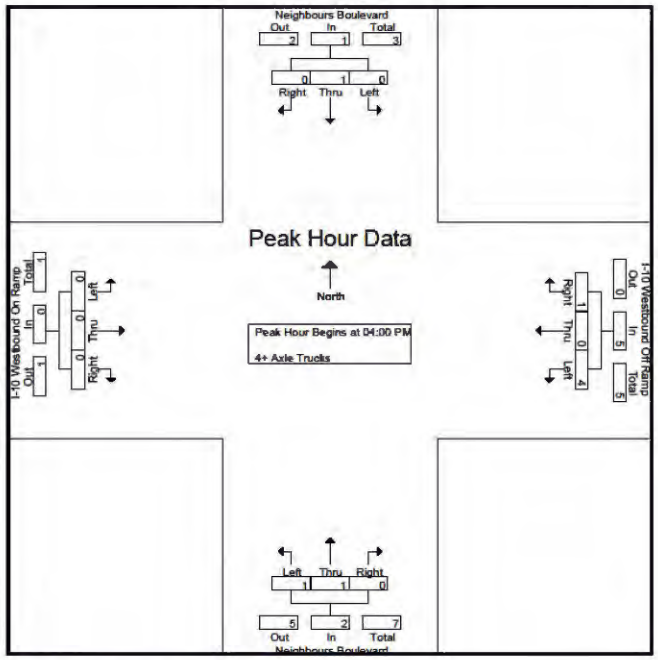
	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	2	0	0	2	0	1	0	1	0	0	0	0	4
Total	0	1	0	1	4	0	1	5	1	1	0	2	0	0	0	0	8
05:00 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3
05:15 PM	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
05:30 PM	0	0	0	0	5	0	0	5	0	2	0	2	0	0	0	0	7
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	10	0	0	10	0	2	0	2	0	0	0	0	13
Grand Total	0	2	0	2	14	0	1	15	1	3	0	4	0	0	0	0	21
Apprch %	0	100	0		93.3	0	6.7		25	75	0		0	0	0		
Total %	0	9.5	0	9.5	66.7	0	4.8	71.4	4.8	14.3	0	19	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Westbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	1	2	0	0	2	0	1	0	1	0	0	0	0	4
Total Volume	0	1	0	1	4	0	1	5	1	1	0	2	0	0	0	0	8
% App. Total	0	100	0		80	0	20		50	50	0		0	0	0		
PHF	.000	.250	.000	.250	.500	.000	.250	.417	.250	.250	.000	.500	.000	.000	.000	.000	.500

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Westbound Ramps
Weather: Sunny

File Name : CRVNE10WPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	2	0	0	2	0	1	0	1	0	0	0	0
Total Volume	0	1	0	1	4	0	1	5	1	1	0	2	0	0	0	0
% App. Total	0	100	0		80	0	20		50	50	0		0	0	0	
PHF	.000	.250	.000	.250	.500	.000	.250	.417	.250	.250	.000	.500	.000	.000	.000	.000

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: City of
Comment 2: N/S:
Comment 3: E/W:
Comment 4: Weather:

	Southbound			Westbound			Northbound			Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	6	8	2	0	2	0	12	0	0	0	0
07:15 AM	0	6	13	1	0	2	1	11	0	0	0	0
07:30 AM	0	7	14	2	0	3	2	14	0	0	0	0
07:45 AM	0	4	5	2	0	1	0	11	0	0	0	0
08:00 AM	0	5	7	5	1	1	0	5	0	0	0	0
08:15 AM	0	7	2	7	0	1	3	5	0	0	0	0
08:30 AM	0	8	1	6	0	1	0	8	0	0	0	0
08:45 AM	0	5	0	1	0	1	0	8	0	0	0	0
Peak 07:00 AM	0	23	40	7	0	8	3	48	0	0	0	0

TOTAL SUMMARY WITH PCE

	Southbound			Westbound			Northbound			Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak 07:00 AM	0	27	45	10	0	11	5	52	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: City of
Comment 2: N/S:
Comment 3: E/W:
Comment 4: Weather:

	Southbound			Westbound			Northbound			Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0
07:15 AM	0	1	3	1	0	1	0	0	0	0	0	0
07:30 AM	0	0	0	1	0	0	1	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	0	0	1	0	0	0	0	0
08:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	0	0	0	0	0	0	0	0
Peak 07:00 AM	0	1	3	2	0	2	1	1	0	0	0	0
With PCE 1.5	0	2	5	3	0	3	2	2	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CR\NE10WAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: City of
Comment 2: N/S:
Comment 3: E/W:
Comment 4: Weather:

	Southbound			Westbound			Northbound			Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
07:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
Peak 07:00 AM	0	1	0	0	0	0	0	1	0	0	0	0
With PCE 2.0	0	2	0	0	0	0	0	2	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CR\NE10WAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: City of
Comment 2: N/S:
Comment 3: E/W:
Comment 4: Weather:

	Southbound			Westbound			Northbound			Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
With PCE 3.0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Westbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Westbound Off Ramp Westbound			Neighbours Boulevard Northbound			I-10 Westbound On Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	11	1	9	0	0	0	18	0	0	0	0
04:15 PM	0	8	5	9	0	3	2	23	0	0	0	0
04:30 PM	0	10	1	6	0	2	0	19	0	0	0	0
04:45 PM	0	13	1	6	0	2	1	12	0	0	0	0
05:00 PM	0	12	0	9	0	1	0	8	0	0	0	0
05:15 PM	0	8	0	4	0	3	0	13	0	0	0	0
05:30 PM	0	3	3	8	0	3	0	6	0	0	0	0
05:45 PM	0	6	1	3	0	2	0	9	0	0	0	0
Peak Hour 04:00 PM	0	42	8	30	0	7	3	72	0	0	0	0

TOTAL SUMMARY WITH PCE

	Neighbours Boulevard Southbound			I-10 Westbound Off Ramp Westbound			Neighbours Boulevard Northbound			I-10 Westbound On Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour 04:00 PM	0	45	10	42	0	10	6	75	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Westbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Westbound Off Ramp Westbound			Neighbours Boulevard Northbound			I-10 Westbound On Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	1	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	2	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
05:45 PM	0	0	0	1	0	0	0	0	0	0	0	0
Peak Hour 04:0	0	0	1	0	0	0	0	0	0	0	0	0
PCE 1.5	0	0	2	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Westbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Westbound Off Ramp Westbound			Neighbours Boulevard Northbound			I-10 Westbound On Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	1	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:0	0	0	0	0	0	0	0	0	0	0	0	0
PCE 2.0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10WPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Westbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Westbound Off Ramp Westbound			Neighbours Boulevard Northbound			I-10 Westbound On Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	2	0	1	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	2	0	0	0	1	0	0	0	0
05:00 PM	0	0	0	3	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	2	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	5	0	0	0	2	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	1	0	4	0	1	1	1	0	0	0	0
PCE 3.0	0	3	0	12	0	3	3	3	0	0	0	0

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PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

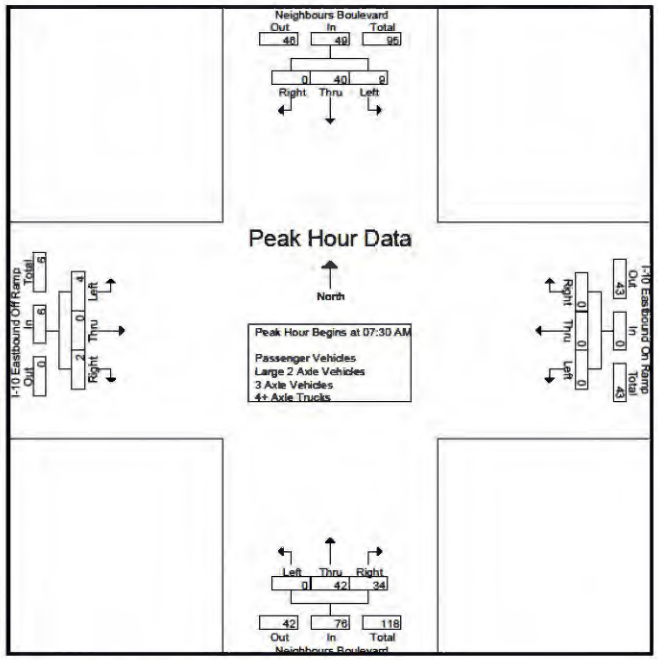
	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	7	0	8	0	0	0	0	0	10	4	14	4	0	0	4	26
07:15 AM	5	5	0	10	0	0	0	0	0	9	4	13	5	0	1	6	29
07:30 AM	5	7	0	12	0	0	0	0	0	18	8	26	2	0	1	3	41
07:45 AM	1	8	0	9	0	0	0	0	0	10	11	21	1	0	0	1	31
Total	12	27	0	39	0	0	0	0	0	47	27	74	12	0	2	14	127
08:00 AM	2	11	0	13	0	0	0	0	0	4	11	15	1	0	0	1	29
08:15 AM	1	14	0	15	0	0	0	0	0	10	4	14	0	0	1	1	30
08:30 AM	3	12	0	15	0	0	0	0	0	6	6	12	2	0	1	3	30
08:45 AM	4	4	0	8	0	0	0	0	0	8	3	11	3	0	0	3	22
Total	10	41	0	51	0	0	0	0	0	28	24	52	6	0	2	8	111
Grand Total	22	68	0	90	0	0	0	0	0	75	51	126	18	0	4	22	238
Apprch %	24.4	75.6	0		0	0	0		0	59.5	40.5		81.8	0	18.2		
Total %	9.2	28.6	0	37.8	0	0	0	0	0	31.5	21.4	52.9	7.6	0	1.7	9.2	
Passenger Vehicles	18	57	0	75	0	0	0	0	0	64	39	103	13	0	3	16	194
% Passenger Vehicles	81.8	83.8	0	83.3	0	0	0	0	0	85.3	76.5	81.7	72.2	0	75	72.7	81.5
Large 2 Axle Vehicles	0	6	0	6	0	0	0	0	0	2	3	5	1	0	0	1	12
% Large 2 Axle Vehicles	0	8.8	0	6.7	0	0	0	0	0	2.7	5.9	4	5.6	0	0	4.5	5
3 Axle Vehicles	1	0	0	1	0	0	0	0	0	1	2	3	1	0	0	1	5
% 3 Axle Vehicles	4.5	0	0	1.1	0	0	0	0	0	1.3	3.9	2.4	5.6	0	0	4.5	2.1
4+ Axle Trucks	3	5	0	8	0	0	0	0	0	8	7	15	3	0	1	4	27
% 4+ Axle Trucks	13.6	7.4	0	8.9	0	0	0	0	0	10.7	13.7	11.9	16.7	0	25	18.2	11.3

	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	7	0	12	0	0	0	0	0	18	8	26	2	0	1	3	41
07:45 AM	1	8	0	9	0	0	0	0	0	10	11	21	1	0	0	1	31
08:00 AM	2	11	0	13	0	0	0	0	0	4	11	15	1	0	0	1	29
08:15 AM	1	14	0	15	0	0	0	0	0	10	4	14	0	0	1	1	30
Total Volume	9	40	0	49	0	0	0	0	0	42	34	76	4	0	2	6	131
% App. Total	18.4	81.6	0		0	0	0		0	55.3	44.7		66.7	0	33.3		
PHF	.450	.714	.000	.817	.000	.000	.000	.000	.000	.583	.773	.731	.500	.000	.500	.500	.799

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PO Box 1178
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:30 AM				07:00 AM			
+0 mins.	1	8	0	9	0	0	0	0	0	18	8	26	4	0	0	4
+15 mins.	2	11	0	13	0	0	0	0	0	10	11	21	5	0	1	6
+30 mins.	1	14	0	15	0	0	0	0	0	4	11	15	2	0	1	3
+45 mins.	3	12	0	15	0	0	0	0	0	10	4	14	1	0	0	1
Total Volume	7	45	0	52	0	0	0	0	0	42	34	76	12	0	2	14
% App. Total	13.5	86.5	0		0	0	0		0	55.3	44.7		85.7	0	14.3	
PHF	.583	.804	.000	.867	.000	.000	.000	.000	.000	.583	.773	.731	.600	.000	.500	.583

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County of Riverside
N/S: Neighbours Boulevard
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File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

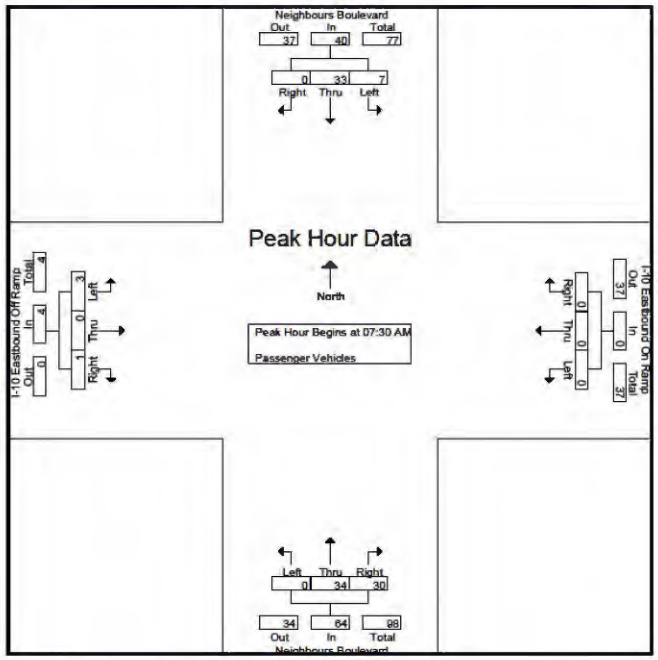
	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	7	0	8	0	0	0	0	0	10	4	14	2	0	0	2	24
07:15 AM	4	3	0	7	0	0	0	0	0	8	1	9	4	0	1	5	21
07:30 AM	3	6	0	9	0	0	0	0	0	15	7	22	1	0	1	2	33
07:45 AM	1	5	0	6	0	0	0	0	0	9	10	19	1	0	0	1	26
Total	9	21	0	30	0	0	0	0	0	42	22	64	8	0	2	10	104
08:00 AM	2	9	0	11	0	0	0	0	0	4	11	15	1	0	0	1	27
08:15 AM	1	13	0	14	0	0	0	0	0	6	2	8	0	0	0	0	22
08:30 AM	3	11	0	14	0	0	0	0	0	6	3	9	2	0	1	3	26
08:45 AM	3	3	0	6	0	0	0	0	0	6	1	7	2	0	0	2	15
Total	9	36	0	45	0	0	0	0	0	22	17	39	5	0	1	6	90
Grand Total	18	57	0	75	0	0	0	0	0	64	39	103	13	0	3	16	194
Apprch %	24	76	0		0	0	0		0	62.1	37.9		81.2	0	18.8		
Total %	9.3	29.4	0	38.7	0	0	0	0	0	33	20.1	53.1	6.7	0	1.5	8.2	

	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	3	6	0	9	0	0	0	0	0	15	7	22	1	0	1	2	33
07:45 AM	1	5	0	6	0	0	0	0	0	9	10	19	1	0	0	1	26
08:00 AM	2	9	0	11	0	0	0	0	0	4	11	15	1	0	0	1	27
08:15 AM	1	13	0	14	0	0	0	0	0	6	2	8	0	0	0	0	22
Total Volume	7	33	0	40	0	0	0	0	0	34	30	64	3	0	1	4	108
% App. Total	17.5	82.5	0		0	0	0		0	53.1	46.9		75	0	25		
PHF	.583	.635	.000	.714	.000	.000	.000	.000	.000	.567	.682	.727	.750	.000	.250	.500	.818

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	3	6	0	9	0	0	0	0	0	15	7	22	1	0	1	2
+15 mins.	1	5	0	6	0	0	0	0	0	9	10	19	1	0	0	1
+30 mins.	2	9	0	11	0	0	0	0	0	4	11	15	1	0	0	1
+45 mins.	1	13	0	14	0	0	0	0	0	6	2	8	0	0	0	0
Total Volume	7	33	0	40	0	0	0	0	0	34	30	64	3	0	1	4
% App. Total	17.5	82.5	0		0	0	0		0	53.1	46.9		75	0	25	
PHF	.583	.635	.000	.714	.000	.000	.000	.000	.000	.567	.682	.727	.750	.000	.250	.500

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County of Riverside
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Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

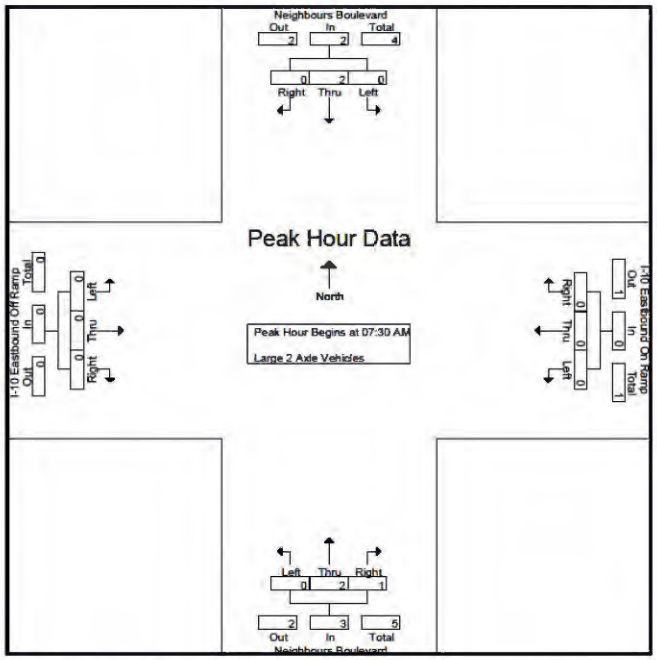
	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	1	2	3	1	0	0	1	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:30 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
08:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	1	1	2	0	0	0	0	5
Grand Total	0	6	0	6	0	0	0	0	0	2	3	5	1	0	0	1	12
Apprch %	0	100	0		0	0	0		0	40	60		100	0	0		
Total %	0	50	0	50	0	0	0	0	0	16.7	25	41.7	8.3	0	0	8.3	

	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
% App. Total	0	100	0		0	0	0		0	66.7	33.3		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.250	.750	.000	.000	.000	.000	.625

Counts Unlimited Inc.
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	2	1	3	0	0	0	0
% App. Total	0	100	0		0	0	0		0	66.7	33.3		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.250	.750	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

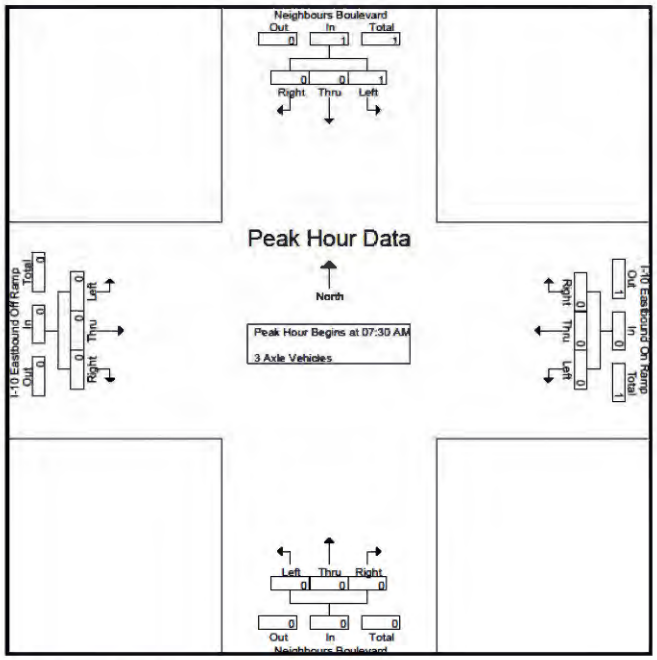
	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	2
Total	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	1	3
Grand Total	1	0	0	1	0	0	0	0	0	1	2	3	1	0	0	1	5
Apprch %	100	0	0		0	0	0		0	33.3	66.7		100	0	0		
Total %	20	0	0	20	0	0	0	0	0	20	40	60	20	0	0	20	

	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	100	0	0		0	0	0		0	0	0		0	0	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

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County of Riverside
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E/W: I-10 Eastbound Ramps
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File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

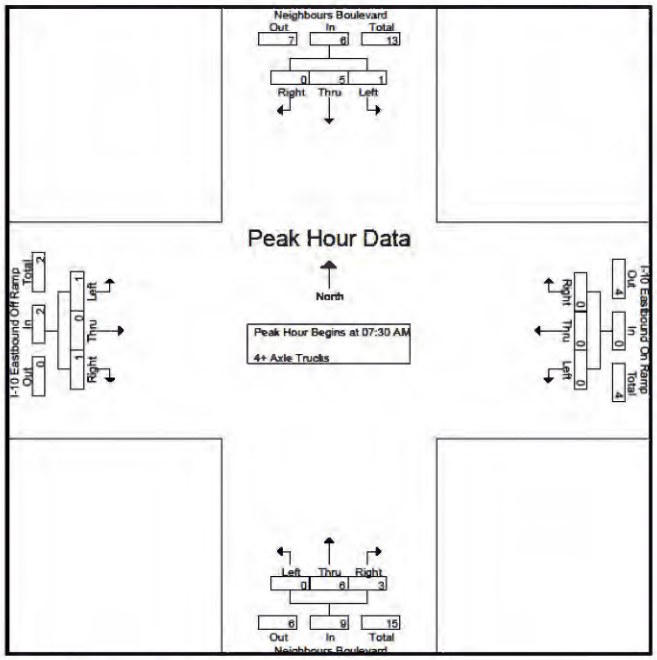
	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	1	0	0	1	0	0	0	0	0	0	2	2	1	0	0	1	4
07:30 AM	1	0	0	1	0	0	0	0	0	2	1	3	1	0	0	1	5
07:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total	2	3	0	5	0	0	0	0	0	3	3	6	3	0	0	3	14
08:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	1	1	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:45 AM	1	0	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4
Total	1	2	0	3	0	0	0	0	0	5	4	9	0	0	1	1	13
Grand Total	3	5	0	8	0	0	0	0	0	8	7	15	3	0	1	4	27
Apprch %	37.5	62.5	0		0	0	0		0	53.3	46.7		75	0	25		
Total %	11.1	18.5	0	29.6	0	0	0	0	0	29.6	25.9	55.6	11.1	0	3.7	14.8	

	Neighbours Boulevard Southbound				I-10 Eastbound On Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	0	1	0	0	0	0	0	2	1	3	1	0	0	1	5
07:45 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
08:00 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	3	2	5	0	0	1	1	6
Total Volume	1	5	0	6	0	0	0	0	0	6	3	9	1	0	1	2	17
% App. Total	16.7	83.3	0		0	0	0		0	66.7	33.3		50	0	50		
PHF	.250	.417	.000	.500	.000	.000	.000	.000	.000	.500	.375	.450	.250	.000	.250	.500	.708

Counts Unlimited Inc.
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: Sunny

File Name : CRVNE10EAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	1	0	0	1	0	0	0	0	0	2	1	3	1	0	0	1
+15 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	3	2	5	0	0	1	1
Total Volume	1	5	0	6	0	0	0	0	0	6	3	9	1	0	1	2
% App. Total	16.7	83.3	0		0	0	0		0	66.7	33.3		50	0	50	
PHF	.250	.417	.000	.500	.000	.000	.000	.000	.000	.500	.375	.450	.250	.000	.250	.500

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

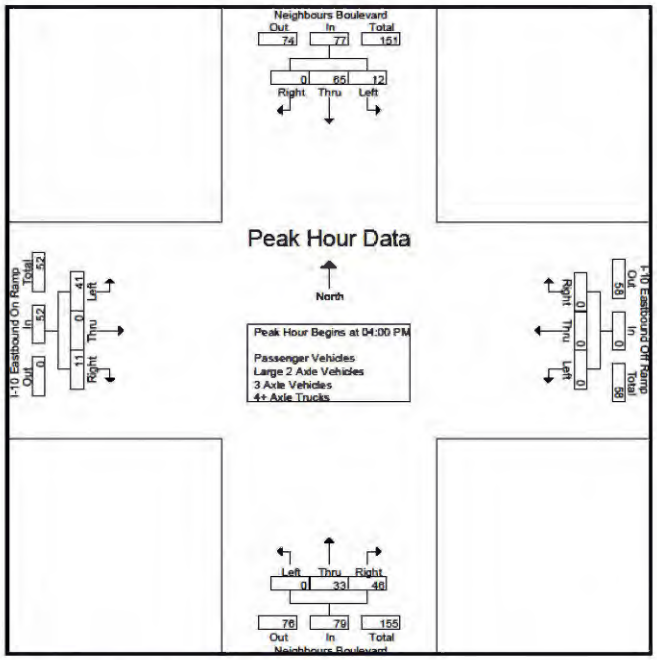
	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	18	0	22	0	0	0	0	0	9	12	21	11	0	6	17	60
04:15 PM	3	16	0	19	0	0	0	0	0	5	13	18	17	0	3	20	57
04:30 PM	3	14	0	17	0	0	0	0	0	11	14	25	8	0	2	10	52
04:45 PM	2	17	0	19	0	0	0	0	0	8	7	15	5	0	0	5	39
Total	12	65	0	77	0	0	0	0	0	33	46	79	41	0	11	52	208
05:00 PM	4	21	0	25	0	0	0	0	0	7	14	21	4	0	2	6	52
05:15 PM	1	15	0	16	0	0	0	0	0	7	6	13	4	0	0	4	33
05:30 PM	3	11	0	14	0	0	0	0	0	7	8	15	3	0	1	4	33
05:45 PM	3	8	0	11	0	0	0	0	0	7	16	23	2	0	0	2	36
Total	11	55	0	66	0	0	0	0	0	28	44	72	13	0	3	16	154
Grand Total	23	120	0	143	0	0	0	0	0	61	90	151	54	0	14	68	362
Apprch %	16.1	83.9	0		0	0	0		0	40.4	59.6		79.4	0	20.6		
Total %	6.4	33.1	0	39.5	0	0	0	0	0	16.9	24.9	41.7	14.9	0	3.9	18.8	
Passenger Vehicles	21	104	0	125	0	0	0	0	0	58	73	131	51	0	13	64	320
% Passenger Vehicles	91.3	86.7	0	87.4	0	0	0	0	0	95.1	81.1	86.8	94.4	0	92.9	94.1	88.4
Large 2 Axle Vehicles	1	3	0	4	0	0	0	0	0	0	10	10	2	0	0	2	16
% Large 2 Axle Vehicles	4.3	2.5	0	2.8	0	0	0	0	0	0	11.1	6.6	3.7	0	0	2.9	4.4
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
% 3 Axle Vehicles	0	0.8	0	0.7	0	0	0	0	0	0	1.1	0.7	0	0	0	0	0.6
4+ Axle Trucks	1	12	0	13	0	0	0	0	0	3	6	9	1	0	1	2	24
% 4+ Axle Trucks	4.3	10	0	9.1	0	0	0	0	0	4.9	6.7	6	1.9	0	7.1	2.9	6.6

	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	18	0	22	0	0	0	0	0	9	12	21	11	0	6	17	60
04:15 PM	3	16	0	19	0	0	0	0	0	5	13	18	17	0	3	20	57
04:30 PM	3	14	0	17	0	0	0	0	0	11	14	25	8	0	2	10	52
04:45 PM	2	17	0	19	0	0	0	0	0	8	7	15	5	0	0	5	39
Total Volume	12	65	0	77	0	0	0	0	0	33	46	79	41	0	11	52	208
% App. Total	15.6	84.4	0		0	0	0		0	41.8	58.2		78.8	0	21.2		
PHF	.750	.903	.000	.875	.000	.000	.000	.000	.000	.750	.821	.790	.603	.000	.458	.650	.867

Counts Unlimited Inc.
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Corona, CA 92878
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	3	16	0	19	0	0	0	0	0	9	12	21	11	0	6	17
+15 mins.	3	14	0	17	0	0	0	0	0	5	13	18	17	0	3	20
+30 mins.	2	17	0	19	0	0	0	0	0	11	14	25	8	0	2	10
+45 mins.	4	21	0	25	0	0	0	0	0	8	7	15	5	0	0	5
Total Volume	12	68	0	80	0	0	0	0	0	33	46	79	41	0	11	52
% App. Total	15	85	0		0	0	0		0	41.8	58.2		78.8	0	21.2	
PHF	.750	.810	.000	.800	.000	.000	.000	.000	.000	.750	.821	.790	.603	.000	.458	.650

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

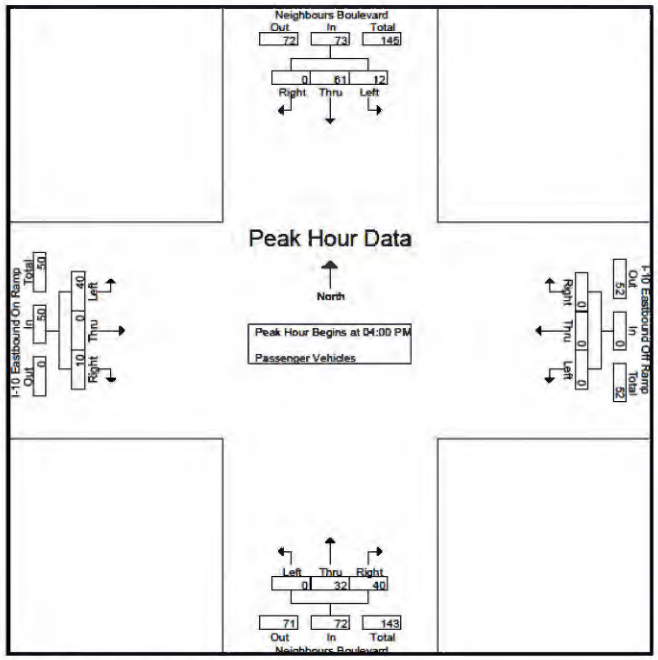
	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	16	0	20	0	0	0	0	0	9	10	19	11	0	6	17	56
04:15 PM	3	16	0	19	0	0	0	0	0	4	11	15	17	0	2	19	53
04:30 PM	3	14	0	17	0	0	0	0	0	11	13	24	8	0	2	10	51
04:45 PM	2	15	0	17	0	0	0	0	0	8	6	14	4	0	0	4	35
Total	12	61	0	73	0	0	0	0	0	32	40	72	40	0	10	50	195
05:00 PM	4	15	0	19	0	0	0	0	0	7	10	17	4	0	2	6	42
05:15 PM	1	12	0	13	0	0	0	0	0	7	6	13	4	0	0	4	30
05:30 PM	2	8	0	10	0	0	0	0	0	5	5	10	1	0	1	2	22
05:45 PM	2	8	0	10	0	0	0	0	0	7	12	19	2	0	0	2	31
Total	9	43	0	52	0	0	0	0	0	26	33	59	11	0	3	14	125
Grand Total	21	104	0	125	0	0	0	0	0	58	73	131	51	0	13	64	320
Apprch %	16.8	83.2	0		0	0	0		0	44.3	55.7		79.7	0	20.3		
Total %	6.6	32.5	0	39.1	0	0	0	0	0	18.1	22.8	40.9	15.9	0	4.1	20	

	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	16	0	20	0	0	0	0	0	9	10	19	11	0	6	17	56
04:15 PM	3	16	0	19	0	0	0	0	0	4	11	15	17	0	2	19	53
04:30 PM	3	14	0	17	0	0	0	0	0	11	13	24	8	0	2	10	51
04:45 PM	2	15	0	17	0	0	0	0	0	8	6	14	4	0	0	4	35
Total Volume	12	61	0	73	0	0	0	0	0	32	40	72	40	0	10	50	195
% App. Total	16.4	83.6	0		0	0	0		0	44.4	55.6		80	0	20		
PHF	.750	.953	.000	.913	.000	.000	.000	.000	.000	.727	.769	.750	.588	.000	.417	.658	.871

Counts Unlimited Inc.
PO Box 1178
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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	4	16	0	20	0	0	0	0	0	9	10	19	11	0	6	17
+15 mins.	3	16	0	19	0	0	0	0	0	4	11	15	17	0	2	19
+30 mins.	3	14	0	17	0	0	0	0	0	11	13	24	8	0	2	10
+45 mins.	2	15	0	17	0	0	0	0	0	8	6	14	4	0	0	4
Total Volume	12	61	0	73	0	0	0	0	0	32	40	72	40	0	10	50
% App. Total	16.4	83.6	0		0	0	0		0	44.4	55.6		80	0	20	
PHF	.750	.953	.000	.913	.000	.000	.000	.000	.000	.727	.769	.750	.588	.000	.417	.658

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

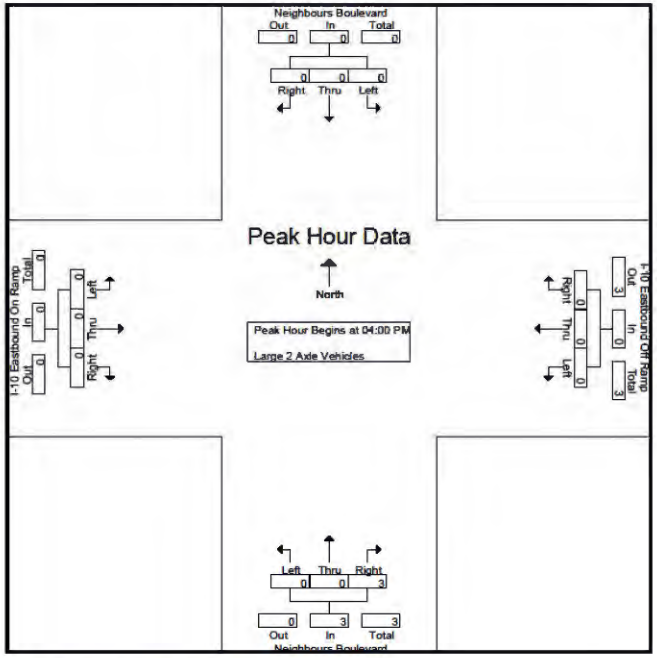
	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
05:00 PM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	3	3	2	0	0	2	5
05:45 PM	1	0	0	1	0	0	0	0	0	0	3	3	0	0	0	0	4
Total	1	3	0	4	0	0	0	0	0	0	7	7	2	0	0	2	13
Grand Total	1	3	0	4	0	0	0	0	0	0	10	10	2	0	0	2	16
Apprch %	25	75	0		0	0	0		0	0	100		100	0	0		
Total %	6.2	18.8	0	25	0	0	0	0	0	0	62.5	62.5	12.5	0	0	12.5	

	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
% App. Total	0	0	0		0	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.750	.000	.000	.000	.000	.750

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	100		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.750	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

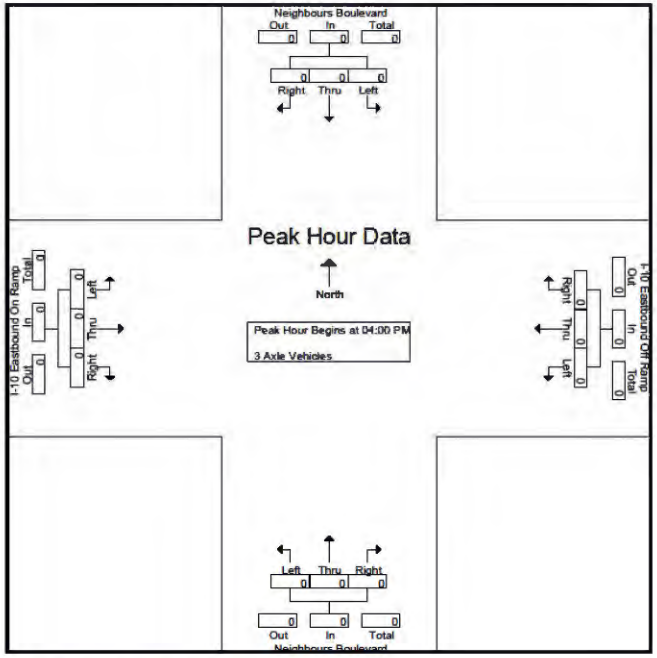
	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Grand Total	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	0	100		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	0	50	50	0	0	0	0	

	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

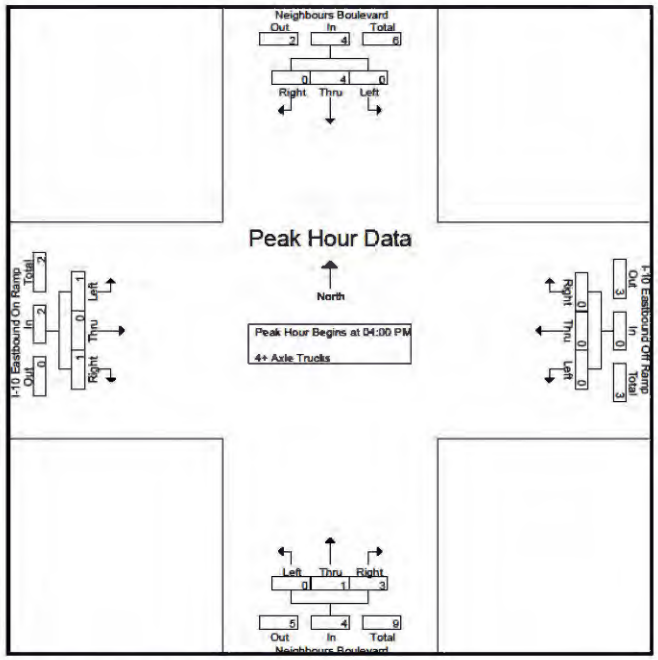
	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	1	1	1	0	0	1	4
Total	0	4	0	4	0	0	0	0	0	1	3	4	1	0	1	2	10
05:00 PM	0	3	0	3	0	0	0	0	0	0	2	2	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	1	3	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total	1	8	0	9	0	0	0	0	0	2	3	5	0	0	0	0	14
Grand Total	1	12	0	13	0	0	0	0	0	3	6	9	1	0	1	2	24
Apprch %	7.7	92.3	0		0	0	0		0	33.3	66.7		50	0	50		
Total %	4.2	50	0	54.2	0	0	0	0	0	12.5	25	37.5	4.2	0	4.2	8.3	

	Neighbours Boulevard Southbound				I-10 Eastbound Off Ramp Westbound				Neighbours Boulevard Northbound				I-10 Eastbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	2	0	0	0	0	0	0	1	1	1	0	0	1	4
Total Volume	0	4	0	4	0	0	0	0	0	1	3	4	1	0	1	2	10
% App. Total	0	100	0		0	0	0		0	25	75		50	0	50		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.750	.500	.250	.000	.250	.500	.625

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: I-10 Eastbound Ramps
Weather: sUNNY

File Name : CRVNE10EPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	1	2	0	0	1	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	0	1	1	1	0	0	1
Total Volume	0	4	0	4	0	0	0	0	0	1	3	4	1	0	1	2
% App. Total	0	100	0		0	0	0		0	25	75		50	0	50	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.750	.500	.250	.000	.250	.500

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramps Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramps Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	1	7	0	0	0	0	0	10	4	2	0	0
07:15 AM	4	3	0	0	0	0	0	8	1	4	0	1
7:30 AM	3	6	0	0	0	0	0	15	7	1	0	1
07:45 AM	1	5	0	0	0	0	0	9	10	1	0	0
08:00 AM	2	9	0	0	0	0	0	4	11	1	0	0
08:15 AM	1	13	0	0	0	0	0	6	2	0	0	0
08:30 AM	3	11	0	0	0	0	0	6	3	2	0	1
08:45 AM	3	3	0	0	0	0	0	6	1	2	0	0
Peak Hour 07:30 AM	7	33	0	0	0	0	0	34	30	3	0	1

SUMMARY WITH PCE

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramps Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramps Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:30 AM	12	51	0	0	0	0	0	55	41	6	0	4

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramps Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramps Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	0
07:15 AM	0	2	0	0	0	0	0	0	1	0	0	0
07:30 AM	0	1	0	0	0	0	0	1	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	0	0	0	0	0	1	0	0	0	0
08:30 AM	0	1	0	0	0	0	0	0	1	0	0	0
08:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:30 AM	0	2	0	0	0	0	0	2	1	0	0	0
PCE 1.5	0	3	0	0	0	0	0	3	2	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramps Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramps Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
07:30 AM	1	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	1	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	1	1	0	0
Peak Hour 07:30 AM	1	0	0	0	0	0	0	0	0	0	0	0
PCE 2.0	2	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramps Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramps Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	0
07:15 AM	1	0	0	0	0	0	0	0	2	1	0	0
07:30 AM	1	0	0	0	0	0	0	2	1	1	0	0
07:45 AM	0	3	0	0	0	0	0	1	0	0	0	0
08:00 AM	0	2	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	3	2	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	1	0	0	0
08:45 AM	1	0	0	0	0	0	0	2	1	0	0	0
Peak Hour 07:30 AM	1	5	0	0	0	0	0	6	3	1	0	1
PCE 3.0	3	15	0	0	0	0	0	18	9	3	0	3

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: sUNNY

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramp Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	4	16	0	0	0	0	0	9	10	11	0	6
04:15 PM	3	16	0	0	0	0	0	4	11	17	0	2
04:30 PM	3	14	0	0	0	0	0	11	13	8	0	2
04:45 PM	2	15	0	0	0	0	0	8	6	4	0	0
05:00 PM	4	15	0	0	0	0	0	7	10	4	0	2
05:15 PM	1	12	0	0	0	0	0	7	6	4	0	0
05:30 PM	2	8	0	0	0	0	0	5	5	1	0	1
05:45 PM	2	8	0	0	0	0	0	7	12	2	0	0
Peak Hour 04:00 PM	12	61	0	0	0	0	0	32	40	40	0	10

Total SUMMARY WITH PCE

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramp Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	12	73	0	0	0	0	0	35	54	43	0	13

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: sUNNY

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramp Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	1	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	1	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	2	0	0	0	0	0	0	1	0	0	0
05:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	3	2	0	0
05:45 PM	1	0	0	0	0	0	0	0	3	0	0	0
Peak Hour 04:00 PM	0	0	0	0	0	0	0	0	3	0	0	0
PCE 1.5	0	0	0	0	0	0	0	0	5	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: sUNNY

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramp Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	1	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
PCE 2.0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNE10EPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: I-10 Eastbound Ramps
Comment 4: Weather: sUNNY

	Neighbours Boulevard Southbound			I-10 Eastbound On Ramp Westbound			Neighbours Boulevard Northbound			I-10 Eastbound Off Ramp Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	2	0	0	0	0	0	0	1	0	0	0
04:15 PM	0	0	0	0	0	0	0	1	1	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	2	0	0	0	0	0	0	1	1	0	0
05:00 PM	0	3	0	0	0	0	0	0	2	0	0	0
05:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	3	0	0	0	0	0	2	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	1	0	0	0
Peak Hour 04:00 PM	0	4	0	0	0	0	0	1	3	1	0	1
PCE 3.0	0	12	0	0	0	0	0	3	9	3	0	3

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

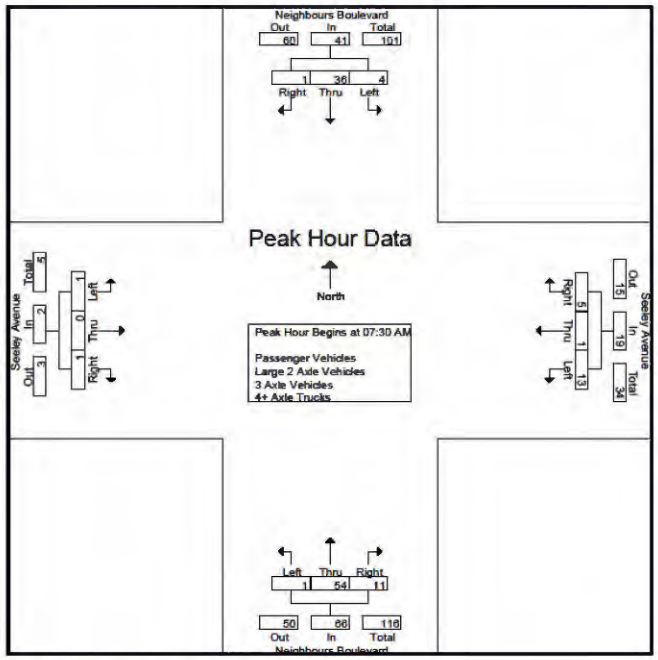
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	5	1	6	2	0	0	2	0	11	1	12	0	0	0	0	20
07:15 AM	1	5	0	6	4	0	1	5	0	9	5	14	0	0	0	0	25
07:30 AM	2	6	1	9	4	1	1	6	0	19	3	22	0	0	1	1	38
07:45 AM	1	7	0	8	3	0	2	5	1	17	1	19	0	0	0	0	32
Total	4	23	2	29	13	1	4	18	1	56	10	67	0	0	1	1	115
08:00 AM	0	10	0	10	3	0	2	5	0	12	4	16	0	0	0	0	31
08:15 AM	1	13	0	14	3	0	0	3	0	6	3	9	1	0	0	1	27
08:30 AM	0	11	0	11	4	0	2	6	1	6	4	11	0	0	0	0	28
08:45 AM	0	6	0	6	2	0	1	3	0	4	2	6	0	0	0	0	15
Total	1	40	0	41	12	0	5	17	1	28	13	42	1	0	0	1	101
Grand Total	5	63	2	70	25	1	9	35	2	84	23	109	1	0	1	2	216
Apprch %	7.1	90	2.9		71.4	2.9	25.7		1.8	77.1	21.1		50	0	50		
Total %	2.3	29.2	0.9	32.4	11.6	0.5	4.2	16.2	0.9	38.9	10.6	50.5	0.5	0	0.5	0.9	
Passenger Vehicles	5	51	2	58	15	0	6	21	2	83	16	101	1	0	0	1	181
% Passenger Vehicles	100	81	100	82.9	60	0	66.7	60	100	98.8	69.6	92.7	100	0	0	50	83.8
Large 2 Axle Vehicles	0	6	0	6	2	0	3	5	0	1	2	3	0	0	0	0	14
% Large 2 Axle Vehicles	0	9.5	0	8.6	8	0	33.3	14.3	0	1.2	8.7	2.8	0	0	0	0	6.5
3 Axle Vehicles	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
% 3 Axle Vehicles	0	0	0	0	0	100	0	2.9	0	0	4.3	0.9	0	0	100	50	1.4
4+ Axle Trucks	0	6	0	6	8	0	0	8	0	0	4	4	0	0	0	0	18
% 4+ Axle Trucks	0	9.5	0	8.6	32	0	0	22.9	0	0	17.4	3.7	0	0	0	0	8.3

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	6	1	9	4	1	1	6	0	19	3	22	0	0	1	1	38
07:45 AM	1	7	0	8	3	0	2	5	1	17	1	19	0	0	0	0	32
08:00 AM	0	10	0	10	3	0	2	5	0	12	4	16	0	0	0	0	31
08:15 AM	1	13	0	14	3	0	0	3	0	6	3	9	1	0	0	1	27
Total Volume	4	36	1	41	13	1	5	19	1	54	11	66	1	0	1	2	128
% App. Total	9.8	87.8	2.4		68.4	5.3	26.3		1.5	81.8	16.7		50	0	50		
PHF	.500	.692	.250	.732	.813	.250	.625	.792	.250	.711	.688	.750	.250	.000	.250	.500	.842

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	1	7	0	8	4	0	1	5	0	9	5	14	0	0	1	1
+15 mins.	0	10	0	10	4	1	1	6	0	19	3	22	0	0	0	0
+30 mins.	1	13	0	14	3	0	2	5	1	17	1	19	0	0	0	0
+45 mins.	0	11	0	11	3	0	2	5	0	12	4	16	1	0	0	1
Total Volume	2	41	0	43	14	1	6	21	1	57	13	71	1	0	1	2
% App. Total	4.7	95.3	0		66.7	4.8	28.6		1.4	80.3	18.3		50	0	50	
PHF	.500	.788	.000	.768	.875	.250	.750	.875	.250	.750	.650	.807	.250	.000	.250	.500

Counts Unlimited Inc.
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(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

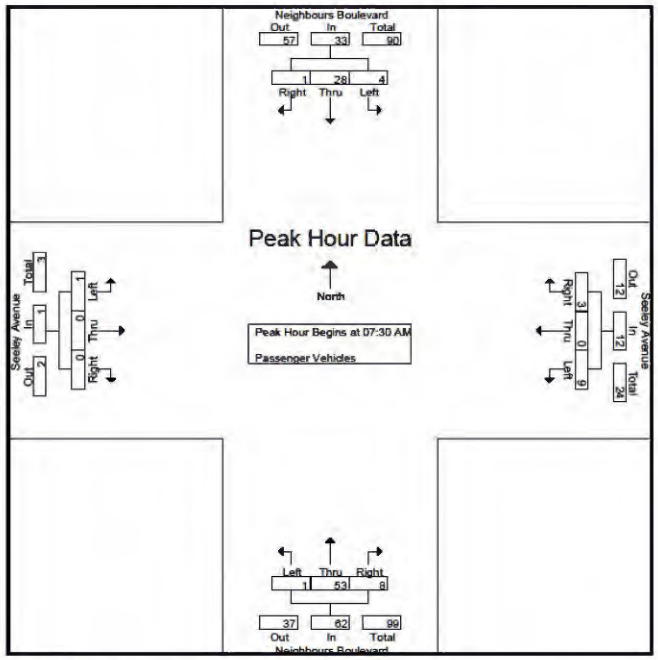
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	5	1	6	1	0	0	1	0	11	1	12	0	0	0	0	19
07:15 AM	1	4	0	5	2	0	1	3	0	9	2	11	0	0	0	0	19
07:30 AM	2	5	1	8	2	0	0	2	0	19	2	21	0	0	0	0	31
07:45 AM	1	4	0	5	3	0	2	5	1	16	1	18	0	0	0	0	28
Total	4	18	2	24	8	0	3	11	1	55	6	62	0	0	0	0	97
08:00 AM	0	8	0	8	2	0	1	3	0	12	3	15	0	0	0	0	26
08:15 AM	1	11	0	12	2	0	0	2	0	6	2	8	1	0	0	1	23
08:30 AM	0	10	0	10	1	0	1	2	1	6	3	10	0	0	0	0	22
08:45 AM	0	4	0	4	2	0	1	3	0	4	2	6	0	0	0	0	13
Total	1	33	0	34	7	0	3	10	1	28	10	39	1	0	0	1	84
Grand Total	5	51	2	58	15	0	6	21	2	83	16	101	1	0	0	1	181
Apprch %	8.6	87.9	3.4		71.4	0	28.6		2	82.2	15.8		100	0	0		
Total %	2.8	28.2	1.1	32	8.3	0	3.3	11.6	1.1	45.9	8.8	55.8	0.6	0	0	0.6	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	5	1	8	2	0	0	2	0	19	2	21	0	0	0	0	31
07:45 AM	1	4	0	5	3	0	2	5	1	16	1	18	0	0	0	0	28
08:00 AM	0	8	0	8	2	0	1	3	0	12	3	15	0	0	0	0	26
08:15 AM	1	11	0	12	2	0	0	2	0	6	2	8	1	0	0	1	23
Total Volume	4	28	1	33	9	0	3	12	1	53	8	62	1	0	0	1	108
% App. Total	12.1	84.8	3		75	0	25		1.6	85.5	12.9		100	0	0		
PHF	.500	.636	.250	.688	.750	.000	.375	.600	.250	.697	.667	.738	.250	.000	.000	.250	.871

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	2	5	1	8	2	0	0	2	0	19	2	21	0	0	0	0
+15 mins.	1	4	0	5	3	0	2	5	1	16	1	18	0	0	0	0
+30 mins.	0	8	0	8	2	0	1	3	0	12	3	15	0	0	0	0
+45 mins.	1	11	0	12	2	0	0	2	0	6	2	8	1	0	0	1
Total Volume	4	28	1	33	9	0	3	12	1	53	8	62	1	0	0	1
% App. Total	12.1	84.8	3		75	0	25		1.6	85.5	12.9		100	0	0	
PHF	.500	.636	.250	.688	.750	.000	.375	.600	.250	.697	.667	.738	.250	.000	.000	.250

Counts Unlimited Inc.
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Corona, CA 92878
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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

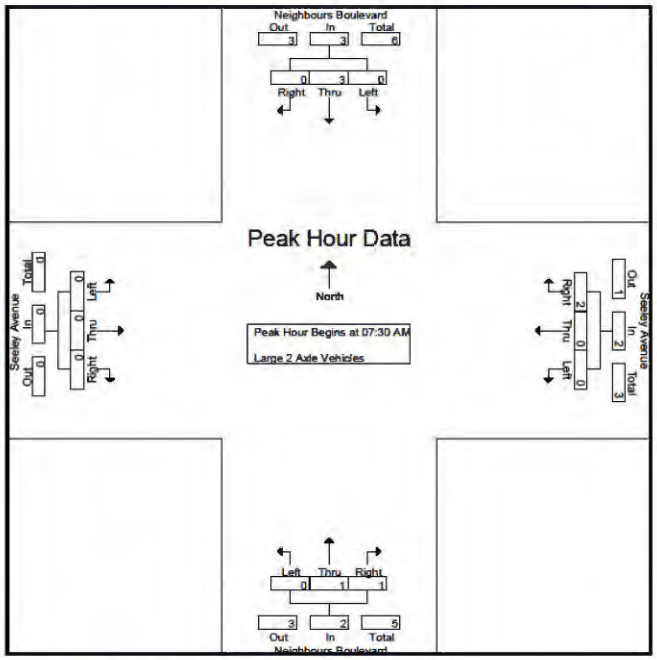
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0	3
07:30 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	3	0	3	1	0	1	2	0	1	1	2	0	0	0	0	7
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
08:30 AM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
08:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	3	1	0	2	3	0	0	1	1	0	0	0	0	7
Grand Total	0	6	0	6	2	0	3	5	0	1	2	3	0	0	0	0	14
Apprch %	0	100	0		40	0	60		0	33.3	66.7		0	0	0		
Total %	0	42.9	0	42.9	14.3	0	21.4	35.7	0	7.1	14.3	21.4	0	0	0	0	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
Total Volume	0	3	0	3	0	0	2	2	0	1	1	2	0	0	0	0	7
% App. Total	0	100	0		0	0	100		0	50	50		0	0	0		
PHF	.000	.750	.000	.750	.000	.000	.500	.500	.000	.250	.250	.500	.000	.000	.000	.000	.875

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0
Total Volume	0	3	0	3	0	0	2	2	0	1	1	2	0	0	0	0
% App. Total	0	100	0		0	0	100		0	50	50		0	0	0	
PHF	.000	.750	.000	.750	.000	.000	.500	.500	.000	.250	.250	.500	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

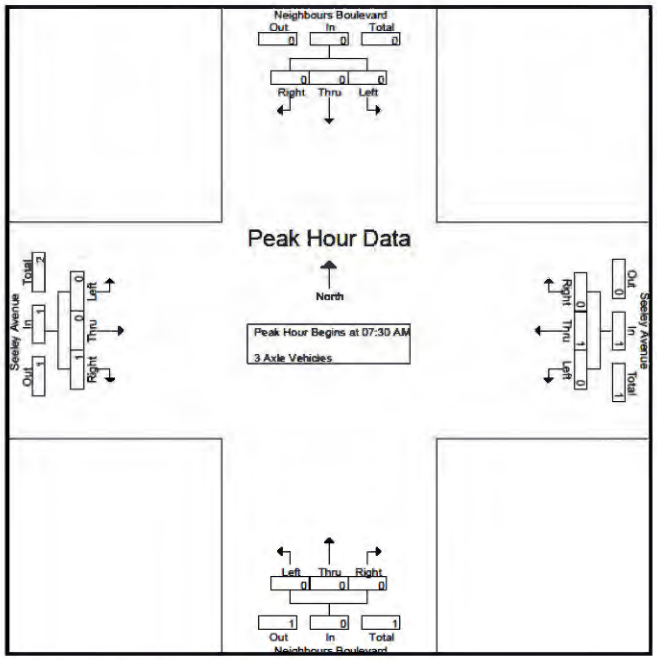
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	1	0	1	0	0	1	1	0	0	1	1	3
Apprch %	0	0	0		0	100	0		0	0	100		0	0	100		
Total %	0	0	0	0	0	33.3	0	33.3	0	0	33.3	33.3	0	0	33.3	33.3	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
% App. Total	0	0	0		0	100	0		0	0	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1
% App. Total	0	0	0		0	100	0		0	0	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

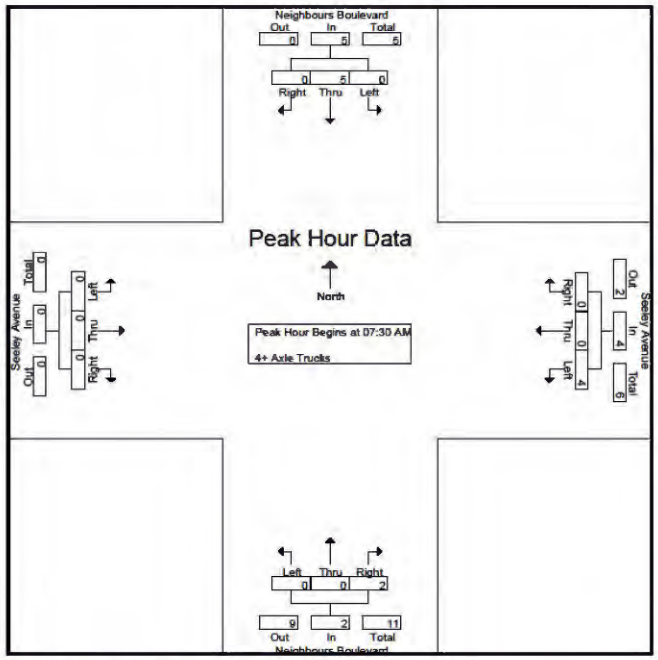
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
07:30 AM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
07:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	2	0	2	4	0	0	4	0	0	2	2	0	0	0	0	8
08:00 AM	0	2	0	2	1	0	0	1	0	0	1	1	0	0	0	0	4
08:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
08:30 AM	0	1	0	1	2	0	0	2	0	0	1	1	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	4	4	0	0	4	0	0	2	2	0	0	0	0	10
Grand Total	0	6	0	6	8	0	0	8	0	0	4	4	0	0	0	0	18
Apprch %	0	100	0		100	0	0		0	0	100		0	0	0		
Total %	0	33.3	0	33.3	44.4	0	0	44.4	0	0	22.2	22.2	0	0	0	0	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
07:45 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:00 AM	0	2	0	2	1	0	0	1	0	0	1	1	0	0	0	0	4
08:15 AM	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
Total Volume	0	5	0	5	4	0	0	4	0	0	2	2	0	0	0	0	11
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0		
PHF	.000	.625	.000	.625	.500	.000	.000	.500	.000	.000	.500	.500	.000	.000	.000	.000	.688

Counts Unlimited Inc.
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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEAM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	2	0	2	1	0	0	1	0	0	1	1	0	0	0	0
+45 mins.	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0
Total Volume	0	5	0	5	4	0	0	4	0	0	2	2	0	0	0	0
% App. Total	0	100	0		100	0	0		0	0	100		0	0	0	
PHF	.000	.625	.000	.625	.500	.000	.000	.500	.000	.000	.500	.500	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

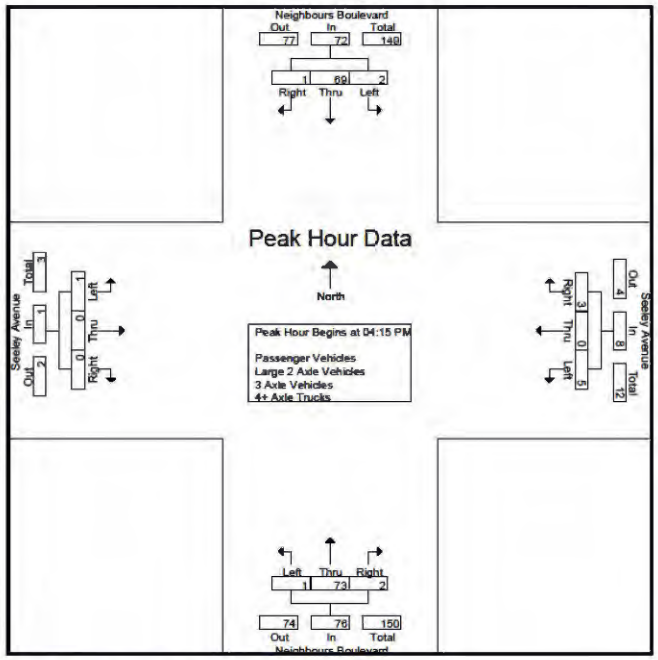
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	19	0	19	0	0	0	0	0	19	0	19	0	0	0	0	38
04:15 PM	0	17	1	18	1	0	1	2	0	16	1	17	0	0	0	0	37
04:30 PM	1	16	0	17	1	0	0	1	1	23	0	24	0	0	0	0	42
04:45 PM	0	14	0	14	1	0	1	2	0	16	1	17	1	0	0	1	34
Total	1	66	1	68	3	0	2	5	1	74	2	77	1	0	0	1	151
05:00 PM	1	22	0	23	2	0	1	3	0	18	0	18	0	0	0	0	44
05:15 PM	2	13	1	16	0	0	0	0	1	12	0	13	0	0	0	0	29
05:30 PM	0	10	0	10	1	0	2	3	0	12	0	12	0	0	0	0	25
05:45 PM	0	6	0	6	0	0	0	0	0	19	0	19	0	0	0	0	25
Total	3	51	1	55	3	0	3	6	1	61	0	62	0	0	0	0	123
Grand Total	4	117	2	123	6	0	5	11	2	135	2	139	1	0	0	1	274
Apprch %	3.3	95.1	1.6		54.5	0	45.5		1.4	97.1	1.4		100	0	0		
Total %	1.5	42.7	0.7	44.9	2.2	0	1.8	4	0.7	49.3	0.7	50.7	0.4	0	0	0.4	
Passenger Vehicles	4	101	2	107	5	0	4	9	2	116	0	118	1	0	0	1	235
% Passenger Vehicles	100	86.3	100	87	83.3	0	80	81.8	100	85.9	0	84.9	100	0	0	100	85.8
Large 2 Axle Vehicles	0	2	0	2	0	0	1	1	0	9	0	9	0	0	0	0	12
% Large 2 Axle Vehicles	0	1.7	0	1.6	0	0	20	9.1	0	6.7	0	6.5	0	0	0	0	4.4
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% 3 Axle Vehicles	0	0.9	0	0.8	0	0	0	0	0	0.7	0	0.7	0	0	0	0	0.7
4+ Axle Trucks	0	13	0	13	1	0	0	1	0	9	2	11	0	0	0	0	25
% 4+ Axle Trucks	0	11.1	0	10.6	16.7	0	0	9.1	0	6.7	100	7.9	0	0	0	0	9.1

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	17	1	18	1	0	1	2	0	16	1	17	0	0	0	0	37
04:30 PM	1	16	0	17	1	0	0	1	1	23	0	24	0	0	0	0	42
04:45 PM	0	14	0	14	1	0	1	2	0	16	1	17	1	0	0	1	34
05:00 PM	1	22	0	23	2	0	1	3	0	18	0	18	0	0	0	0	44
Total Volume	2	69	1	72	5	0	3	8	1	73	2	76	1	0	0	1	157
% App. Total	2.8	95.8	1.4		62.5	0	37.5		1.3	96.1	2.6		100	0	0		
PHF	.500	.784	.250	.783	.625	.000	.750	.667	.250	.793	.500	.792	.250	.000	.000	.250	.892

Counts Unlimited Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	0	17	1	18	1	0	1	2	0	19	0	19	0	0	0	0
+15 mins.	1	16	0	17	1	0	0	1	0	16	1	17	0	0	0	0
+30 mins.	0	14	0	14	1	0	1	2	1	23	0	24	0	0	0	0
+45 mins.	1	22	0	23	2	0	1	3	0	16	1	17	1	0	0	1
Total Volume	2	69	1	72	5	0	3	8	1	74	2	77	1	0	0	1
% App. Total	2.8	95.8	1.4		62.5	0	37.5		1.3	96.1	2.6		100	0	0	
PHF	.500	.784	.250	.783	.625	.000	.750	.667	.250	.804	.500	.802	.250	.000	.000	.250

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Corona, CA 92878
(951) 268-6268

County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Passenger Vehicles

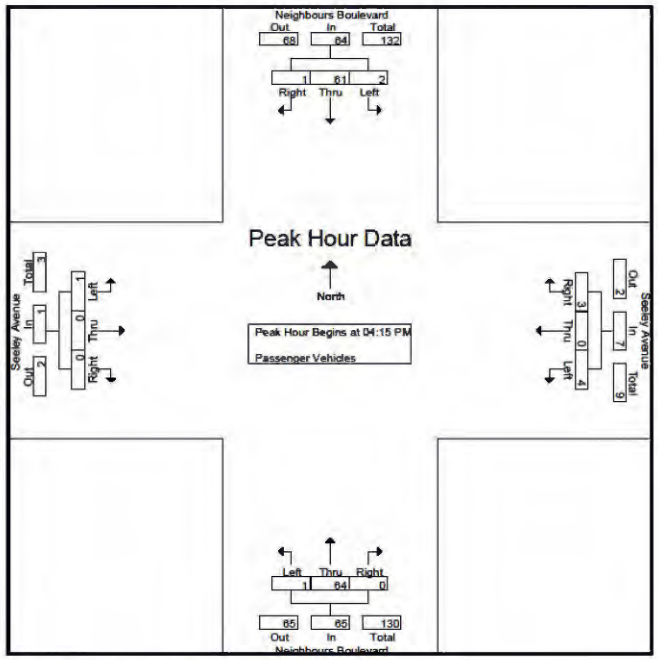
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	18	0	18	0	0	0	0	0	17	0	17	0	0	0	0	35
04:15 PM	0	16	1	17	1	0	1	2	0	13	0	13	0	0	0	0	32
04:30 PM	1	15	0	16	0	0	0	0	1	22	0	23	0	0	0	0	39
04:45 PM	0	12	0	12	1	0	1	2	0	14	0	14	1	0	0	1	29
Total	1	61	1	63	2	0	2	4	1	66	0	67	1	0	0	1	135
05:00 PM	1	18	0	19	2	0	1	3	0	15	0	15	0	0	0	0	37
05:15 PM	2	9	1	12	0	0	0	0	1	11	0	12	0	0	0	0	24
05:30 PM	0	7	0	7	1	0	1	2	0	8	0	8	0	0	0	0	17
05:45 PM	0	6	0	6	0	0	0	0	0	16	0	16	0	0	0	0	22
Total	3	40	1	44	3	0	2	5	1	50	0	51	0	0	0	0	100
Grand Total	4	101	2	107	5	0	4	9	2	116	0	118	1	0	0	1	235
Apprch %	3.7	94.4	1.9		55.6	0	44.4		1.7	98.3	0		100	0	0		
Total %	1.7	43	0.9	45.5	2.1	0	1.7	3.8	0.9	49.4	0	50.2	0.4	0	0	0.4	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	16	1	17	1	0	1	2	0	13	0	13	0	0	0	0	32
04:30 PM	1	15	0	16	0	0	0	0	1	22	0	23	0	0	0	0	39
04:45 PM	0	12	0	12	1	0	1	2	0	14	0	14	1	0	0	1	29
05:00 PM	1	18	0	19	2	0	1	3	0	15	0	15	0	0	0	0	37
Total Volume	2	61	1	64	4	0	3	7	1	64	0	65	1	0	0	1	137
% App. Total	3.1	95.3	1.6		57.1	0	42.9		1.5	98.5	0		100	0	0		
PHF	.500	.847	.250	.842	.500	.000	.750	.583	.250	.727	.000	.707	.250	.000	.000	.250	.878

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	16	1	17	1	0	1	2	0	13	0	13	0	0	0	0
+15 mins.	1	15	0	16	0	0	0	0	1	22	0	23	0	0	0	0
+30 mins.	0	12	0	12	1	0	1	2	0	14	0	14	1	0	0	1
+45 mins.	1	18	0	19	2	0	1	3	0	15	0	15	0	0	0	0
Total Volume	2	61	1	64	4	0	3	7	1	64	0	65	1	0	0	1
% App. Total	3.1	95.3	1.6		57.1	0	42.9		1.5	98.5	0		100	0	0	
PHF	.500	.847	.250	.842	.500	.000	.750	.583	.250	.727	.000	.707	.250	.000	.000	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- Large 2 Axle Vehicles

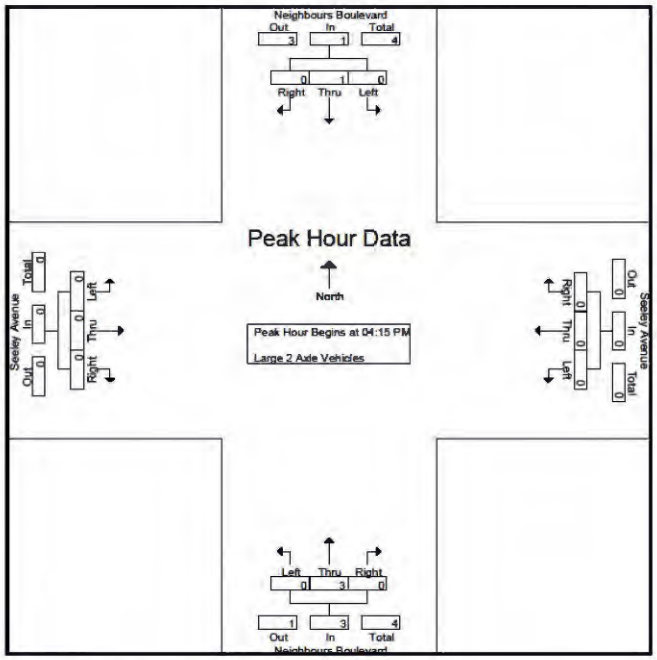
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	1	1	0	2	0	2	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	2	0	2	0	0	1	1	0	5	0	5	0	0	0	0	8
Grand Total	0	2	0	2	0	0	1	1	0	9	0	9	0	0	0	0	12
Apprch %	0	100	0		0	0	100		0	100	0		0	0	0		
Total %	0	16.7	0	16.7	0	0	8.3	8.3	0	75	0	75	0	0	0	0	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.500

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 3 Axle Vehicles

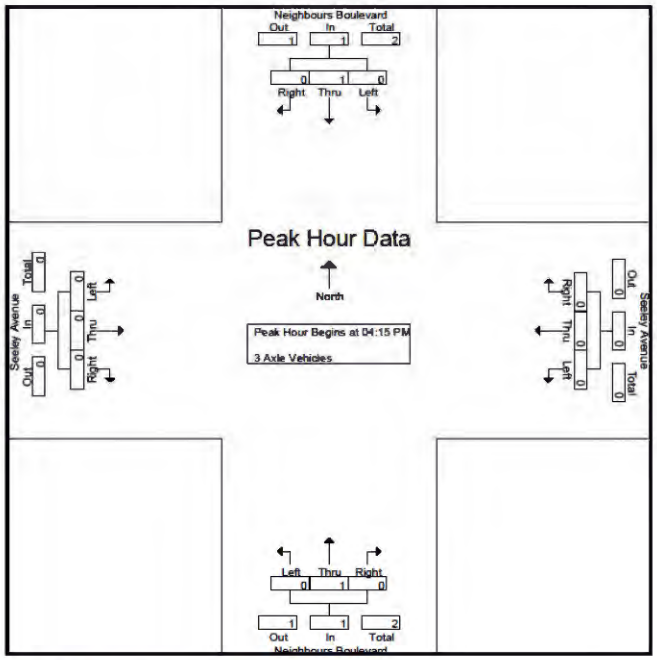
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Grand Total	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 1

Groups Printed- 4+ Axle Trucks

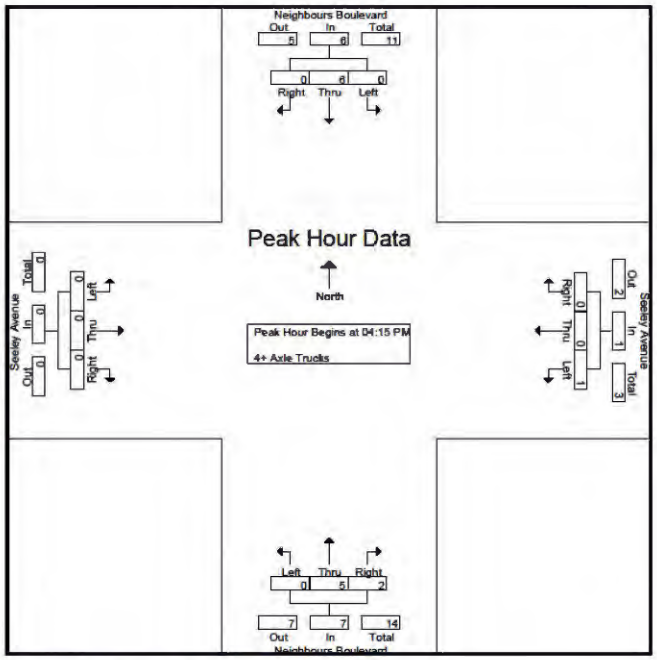
	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
04:30 PM	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
04:45 PM	0	2	0	2	0	0	0	0	0	1	1	2	0	0	0	0	4
Total	0	5	0	5	1	0	0	1	0	4	2	6	0	0	0	0	12
05:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:15 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:30 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	8	0	8	0	0	0	0	0	5	0	5	0	0	0	0	13
Grand Total	0	13	0	13	1	0	0	1	0	9	2	11	0	0	0	0	25
Apprch %	0	100	0		100	0	0		0	81.8	18.2		0	0	0		
Total %	0	52	0	52	4	0	0	4	0	36	8	44	0	0	0	0	

	Neighbours Boulevard Southbound				Seeley Avenue Westbound				Neighbours Boulevard Northbound				Seeley Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
04:30 PM	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	3
04:45 PM	0	2	0	2	0	0	0	0	0	1	1	2	0	0	0	0	4
05:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
Total Volume	0	6	0	6	1	0	0	1	0	5	2	7	0	0	0	0	14
% App. Total	0	100	0		100	0	0		0	71.4	28.6		0	0	0		
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.000	.625	.500	.875	.000	.000	.000	.000	.875

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County of Riverside
N/S: Neighbours Boulevard
E/W: Seeley Avenue
Weather: Sunny

File Name : CRVNESEPM
Site Code : 00000001
Start Date : 9/22/2011
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0
+15 mins.	0	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0
+30 mins.	0	2	0	2	0	0	0	0	0	1	1	2	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	6	0	6	1	0	0	1	0	5	2	7	0	0	0	0
% App. Total	0	100	0		100	0	0		0	71.4	28.6		0	0	0	
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.000	.625	.500	.875	.000	.000	.000	.000

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	5	1	1	0	0	0	11	1	0	0	0
07:15 AM	1	4	0	2	0	1	0	9	2	0	0	0
07:30 AM	2	5	1	2	0	0	0	19	2	0	0	0
07:45 AM	1	4	0	3	0	2	1	16	1	0	0	0
08:00 AM	0	8	0	2	0	1	0	12	3	0	0	0
08:15 AM	1	11	0	2	0	0	0	6	2	1	0	0
08:30 AM	0	10	0	1	0	1	1	6	3	0	0	0
08:45 AM	0	4	0	2	0	1	0	4	2	0	0	0
Peak Hour 07:30 AM	4	28	1	9	0	3	1	53	8	1	0	0

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour 07:30 AM	4	48	1	21	2	6	1	55	16	1	0	2

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	1	0	0	0
07:30 AM	0	1	0	0	0	1	0	0	0	0	0	0
07:45 AM	0	1	0	0	0	0	0	1	0	0	0	0
08:00 AM	0	0	0	0	0	1	0	0	0	0	0	0
08:15 AM	0	1	0	0	0	0	0	0	1	0	0	0
08:30 AM	0	0	0	1	0	1	0	0	0	0	0	0
08:45 AM	0	2	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:30 AM	0	3	0	0	0	2	0	1	1	0	0	0
PCE 1.5	0	5	0	0	0	3	0	2	2	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	0
07:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
PCE 2.0	0	0	0	0	2	0	0	0	0	0	0	2

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEAM.ppd
Start Date: 9/22/2011
Start Time: 7:00:00 AM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
07:00 AM	0	0	0	1	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	1	0	0	0	0	1	0	0	0
07:30 AM	0	0	0	2	0	0	0	0	1	0	0	0
07:45 AM	0	2	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	2	0	1	0	0	0	0	1	0	0	0
08:15 AM	0	1	0	1	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	2	0	0	0	0	1	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 07:30 AM	0	5	0	4	0	0	0	0	2	0	0	0
PCE 3.0	0	15	0	12	0	0	0	0	6	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	18	0	0	0	0	0	17	0	0	0	0
04:15 PM	0	16	1	1	0	1	0	13	0	0	0	0
04:30 PM	1	15	0	0	0	0	1	22	0	0	0	0
04:45 PM	0	12	0	1	0	1	0	14	0	1	0	0
05:00 PM	1	18	0	2	0	1	0	15	0	0	0	0
05:15 PM	2	9	1	0	0	0	1	11	0	0	0	0
05:30 PM	0	7	0	1	0	1	0	8	0	0	0	0
05:45 PM	0	6	0	0	0	0	0	16	0	0	0	0
Peak Hour 04:15 PM	2	61	1	4	0	3	1	64	0	1	0	0

SUMMARY WITH PCE

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Peak Hour 04:15 PM	2	83	1	7	0	3	1	86	6	1	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	2	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
05:30 PM	0	0	0	0	0	1	0	2	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	2	0	0	0	0
Peak Hour 04:15 PM	0	1	0	0	0	0	0	3	0	0	0	0
PCE 1.5	0	2	0	0	0	0	0	5	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	1	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour 04:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
PCE 2.0	0	2	0	0	0	0	0	2	0	0	0	0

File Name: X:\Jobs Folder\11Q3\041-11222\CRVNESEPM.ppd
Start Date: 9/22/2011
Start Time: 4:00:00 PM
Site Code: 00000001
Comment 1: County of Riverside
Comment 2: N/S: Neighbours Boulevard
Comment 3: E/W: Seeley Avenue
Comment 4: Weather: Sunny

	Neighbours Boulevard Southbound			Seeley Avenue Westbound			Neighbours Boulevard Northbound			Seeley Avenue Eastbound		
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
04:00 PM	0	1	0	0	0	0	0	1	0	0	0	0
04:15 PM	0	1	0	0	0	0	0	1	1	0	0	0
04:30 PM	0	1	0	1	0	0	0	1	0	0	0	0
04:45 PM	0	2	0	0	0	0	0	1	1	0	0	0
05:00 PM	0	2	0	0	0	0	0	2	0	0	0	0
05:15 PM	0	3	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	3	0	0	0	0	0	2	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
Peak Hour 04:15 PM	0	6	0	1	0	0	0	5	2	0	0	0
PCE 3.0	0	18	0	3	0	0	0	15	6	0	0	0

APPENDIX B

EXISTING INTERSECTION ANALYSIS WORKSHEETS

Scenario Report

Scenario:	Existing AM
Command:	Existing AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	none
Trip Distribution:	none
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.010	A	9.0	0.010	+ 0.000 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.015	A	9.0	0.015	+ 0.000 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.010	A	9.2	0.010	+ 0.000 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.4	0.030	A	9.4	0.030	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: A[9.0]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1 0	0	0	1 0	0	1	0 0
Volume Module:												
Base Vol:		2			0			0			6	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		2			0			0			6	
Added Vol:		0			0			0			0	
PasserByVol:	6	0	3	0	1	0	0	0	5	0	0	0
Initial Fut:	0	2	0	0	0	0		0	0		6	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:		3			0			0			10	
Reduct Vol:	0	0		0	0		0	0		0	0	
FinalVolume:	10	3	5	0	2	0	0	0	8	0	10	8
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	xxxxx
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	30	2		28	xxxxx
Potent Cap.:	1634	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	866	1089	973	869	xxxxx
Move Cap.:	1634	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	861	1089	952	864	xxxxx
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.01	0.01	0.01	xxxx
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*			*		*	*	*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	972	911	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1	0.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.8	9.0	xxxx	xxxxx
Shared LOS:		*			*		*	*	A			*
ApproachDel:		xxxxxx			xxxxx			8.8			9.0	
ApproachLOS:		*			*			A			A	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[9.0]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Channel		
Lanes:	0	1	0 0	0	0	1 0 1	0	0	0 0	0	1	0 0
Volume Module:												
Base Vol:		52			0			45			0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		52			0			45			0	
Added Vol:		0			0			0			0	
PasserByVol:	5	0	0	0	27	0	0	0	0	0	0	0
Initial Fut:	0	52	0	0	0	0		45	0		0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:		67			0			58			0	
Reduct Vol:		0			0	0		0	0		0	0
FinalVolume:	6	67	0	0	0	0		58	0		0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	35	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		114	
Potent Cap.:	1590	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	143	780	1007
Move Cap.:	1590	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	855	777	1003
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	852	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0
LOS by Move:		*			*		*	*	*			* 8.6
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	852	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx
Shared LOS:		*			*		*	*	*			*
ApproachDel:		xxxxxx			xxxxx			xxxxx			9.0	
ApproachLOS:		*			*			*			A	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[9.2]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1 0		1	0 1		0 0 0		1 0	0 1	0	0 0 0	0
Volume Module:												
Base Vol:	55			12			0		6	4		0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55			12			0		6	4		0
Added Vol:	0		41	0		51	0	0	0	0		0
PasserByVol:	0		0	0		0		0	0	0		0
Initial Fut:	55		41	12		51	0	0	6	4		0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	69			15			8		8	5		0
Reduct Vol:	0		51	0		64	0	0	0	0		0
FinalVolume:	69		0	15		0	8	0	8	5		0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	69	xxxx	xxxxx	188	163	64	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1545	xxxx	xxxxx	805	733	1006	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1545	xxxx	xxxxx	799	726	1006	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.00	0.00	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	8.6	xxxxx	xxxx	xxxxx
LOS by Move:		*			A		*	*	A			*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	799	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:		*			A		*	A		*		*
ApproachDel:	xxxxxx			xxxxxx			9.2			xxxxxx		
ApproachLOS:		*			*			A			*	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: A[9.4]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0		0	0 0 1! 0		0		0	0	0	1! 0 0	0
Volume Module:												
Base Vol:	55			4			1	1	2			2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55			4			1	1	2			2
Added Vol:	0		16	0		48	0	0	0		21	0
PasserByVol:	0			0			0	0	0			0
Initial Fut:	55		16	4		48	1	1	2		21	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	65			5			1	1	2			2
Reduct Vol:	0		19	0		57	0	0	0		25	0
FinalVolume:	65		0	5		0	1	1	2		0	2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2		6.5	
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	7.1	4.0	6.2
Capacity Module:										3.5		3.3
Cnflict Vol:	58	xxxx	xxxxx	84	xxxx	xxxxx	149	154	58		145	
Potent Cap.:	1559	xxxx	xxxxx	1525	xxxx	xxxxx	823	742	1014	145	750	75
Move Cap.:	1559	xxxx	xxxxx	1525	xxxx	xxxxx	813	739	1014	828	747	992
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.00	0.00	824	0.00	992
Level Of Service Module:										0.03		0.01
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*			A		*	*	*			*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	937	xxxxx	xxxx	847	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx	xxxxx	9.4	xxxxx
Shared LOS:		*			*		*	*		*		A
ApproachDel:	xxxxxx			xxxxxx			8.9			9.4		
ApproachLOS:		*			*			A			A	

Note: Queue reported is the number of cars per lane.

APPENDIX C
PROJECT CONSTRUCTION ANALYSIS WORKSHEETS

Scenario Report

Scenario: Existing Plus Ambient AM

Command: Existing Plus Ambient AM
Volume: Existing AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation:
Trip Distribution: AMALL
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base v/ c	Future LOS	Future Del/ Veh	Future v/ c	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	A	9.0	0.011	+ 0.000 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	A	9.0	0.016	+ 0.000 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	A	9.2	0.011	+ 0.000 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	A	9.5	0.033	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: A[9.0]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1 0	0	0	1 0	0	1	0 0
Volume Module:												
Base Vol:	2			0			0		6			4
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	2			0			0		6			4
Added Vol:	0			0			0		0			0
PasserByVol:	6	0	3	0	1	0	0	0	0	5		0
Initial Fut:	0	2	0	0	0	0		0	6	0	4	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:	4			0			0		11			7
Reduct Vol:	0			0			0		0			0
FinalVolume:	4		5	0		2	0		11	9		7
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	6.5	6.2			6.5
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	4.0	3.3			4.0
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx					30
Potent Cap.:	1634	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	864	1088			867
Move Cap.:	1634	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	858	1088			861
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.01			0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx
LOS by Move:		*			*		*	*	*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				
Shared LOS:		*			*							
ApproachDel:		xxxxxx			xxxxxx							
ApproachLOS:		*			*							

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[9.0]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1	0	0	0	1 0	1	0	0	0	1	0 0
Volume Module:												
Base Vol:	52			0			45		0			0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	56			0			49		0			0
Added Vol:	0			0			0		0			0
PasserByVol:	5	0		0			0		0			0
Initial Fut:	0	56	0	0	0	0	49	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:	72			0			62		0			0
Reduct Vol:	0			0			0		0			0
FinalVolume:	72		0	0		0	62		0	0		0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			6.5
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			4.0
Capacity Module:												
Cnflict Vol:	37	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			123
Potent Cap.:	1586	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			771
Move Cap.:	1586	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			768
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxx
LOS by Move:		*			*		*	*	*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx				
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx				
Shared LOS:		*			*							
ApproachDel:		xxxxxx			xxxxxx							
ApproachLOS:		*			*							

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: A[9.2]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0	1	0	0	1	0	0	0	1	0	0
Volume Module:												
Base Vol:	55			12			0	6		4		0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			13			0	6		4		0
Added Vol:	0	44		0	55		0	0	0	0	0	0
PasserByVol:	0	0		0	0		0	0	0	0	0	0
Initial Fut:	59	0		13	0		0	6	0	4	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	74			16			0	8		5		0
Reduct Vol:	0	55		0	69		0	0	0	0	0	0
FinalVolume:	74	0		16	0		0	8	0	5	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	74	xxxx	xxxxx	203	176	69	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1538	xxxx	xxxxx	790	721	1000	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1538	xxxx	xxxxx	783	714	1000	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.01	0.00	0.01	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	8.6	xxxxx	xxxx	xxxxx
LOS by Move:		*			*			*			*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	783	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	9.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:		*			*		A	*			*	
ApproachDel:	xxxxxx			xxxxxx			9.2			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[9.5]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1! 0	0	1! 0	0	0	0	1! 0
Volume Module:												
Base Vol:	55			4			1	1	2			2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			4			1	1	2			2
Added Vol:	0	17		0	52		0	0	0	23	0	0
PasserByVol:	0			0			0	0	0			0
Initial Fut:	59	0		4	0		1	1	2	0	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	71			5			1	1	3			3
Reduct Vol:	0	21		0	62		0	0	0	27	0	0
FinalVolume:	71	0		5	0		1	1	3	0	0	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2			6.5
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	7.1	4.0	6.2
Capacity Module:										3.5		3.3
Cnflict Vol:	63	xxxx	xxxxx	91	xxxx	xxxxx	161	166	62			156
Potent Cap.:	1553	xxxx	xxxxx	1517	xxxx	xxxxx	809	730	1008	157	739	881
Move Cap.:	1553	xxxx	xxxxx	1517	xxxx	xxxxx	798	727	1008	814	736	985
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.00	0.00	0.00	809	0.00	985
Level Of Service Module:										0.03		0.01
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.3	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*			*			*			*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	927	xxxxx	xxxx	834	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx	xxxxx	9.5	xxxxx
Shared LOS:		*			*		*	*			A	
ApproachDel:	xxxxxx			xxxxxx			8.9			9.5		
ApproachLOS:	*			*			A			A		

Note: Queue reported is the number of cars per lane.

Scenario Report

Scenario:	Existing Plus Ambient PM
Command:	Existing Plus Ambient PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	A	8.6	0.005	+ 0.000 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	A	9.5	0.066	+ 0.000 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	A	9.6	0.068	+ 0.000 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	A	9.9	0.011	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 3.5 Worst Case Level Of Service: A[8.6]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	0	1 0	0	0	1 0	0	0	1! 0
Volume Module:												
Base Vol:	5			0			0			2		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	5			0			0			2		
Added Vol:	0			0			0			2		
PasserByVol:	1	0	2	0	4	0	0	0	0	0	3	0
Initial Fut:	0	5	0	0	0	0	0	0	0	2	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
PHF Volume:	8			0			0			3		
Reduct Vol:	0			0			0			3		
FinalVolume:	8			0			0			0		
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	6	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	21	6		19	
Potent Cap.:	1628	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	877	1082	991	879	1078
Move Cap.:	1628	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	876	1082	991	878	1078
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			*			*		*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1004	xxxx	1012	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.6	xxxxx	8.6	xxxxx
Shared LOS:		*			*		*		A		A	
ApproachDel:	xxxxxx			xxxxxx			8.6			8.6		
ApproachLOS:	*			*			A			A		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: A[9.5]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	0	1 0	1	0	1	0	0	0 1
Volume Module:												
Base Vol:	75			0			10			0		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	81			0			11			0		
Added Vol:	0			0			0			0		
PasserByVol:	6	0	0	0	49	0	0	0	0	0	45	0
Initial Fut:	0	81	0	0	0	0	11	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	97			0			13			0		
Reduct Vol:	0			0	58		0	0		0	54	0
FinalVolume:	97			0			13	0		0		0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.5	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	4.0	6.2
Capacity Module:										3.5		3.3
Cnflict Vol:	58	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		170	
Potent Cap.:	1559	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	177	727	977
Move Cap.:	1559	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	818	723	965
Volume/Cap:	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	815	0.07	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0
LOS by Move:	*			*			*		*			8.8
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	815	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx
Shared LOS:		*			*		*		*		*	
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.5		
ApproachLOS:	A			*			*			A		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: A[9.6]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0 1! 0		0	1 0	0	0	1 0		0	0 0 0	
Volume Module:												
Base Vol:	35	54	0	12	73	0	43	14	0	13	14	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	38	58	0	13	79	0	46	15	0	14	15	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	58	0	13	79	0	46	15	0	14	15	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	44	67	0	15	91	0	54	17	0	16	17	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	44	67	0	15	91	0	54	17	0	16	17	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	44	xxxx	xxxxx	198	164	91	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1578	xxxx	xxxxx	795	732	972	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1578	xxxx	xxxxx	789	725	972	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	0.07	0.00	0.02	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	8.8	xxxxx	xxxx	xxxxx
LOS by Move:	*			*			*		A	*		*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	789	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*			*			A	*		*		*
ApproachDel:	xxxxxx			xxxxx			9.6			xxxxxx		
ApproachLOS:	*			*			A			*		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: A[9.9]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0		0	0 1! 0		0	0 0		0	0 1! 0	
Volume Module:												
Base Vol:	86	93	0	2	2	1	1	1	0	0	0	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	93	100	0	2	2	1	1	1	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93	100	0	2	2	1	1	1	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	104	112	0	2	2	1	1	1	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	104	112	0	2	2	1	1	1	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	102	xxxx	xxxxx	111	xxxx	xxxxx	218	xxxx	xxxxx	216	217	108
Potent Cap.:	1503	xxxx	xxxxx	1491	xxxx	xxxxx	743	xxxx	xxxxx	745	685	952
Move Cap.:	1503	xxxx	xxxxx	1491	xxxx	xxxxx	738	xxxx	xxxxx	743	683	952
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.01	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.4	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			*			A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	796	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.6	xxxxx
Shared LOS:	*			*			*	*	*	*	A	
ApproachDel:	xxxxxx			xxxxx			9.9			9.6		
ApproachLOS:	*			*			A			A		

Note: Queue reported is the number of cars per lane.

With Project

Scenario Report

Scenario:	Existing Plus Ambient AM
Command:	Existing Plus Ambient AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0C011	C	16.4	0.179	+ 7.399 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	B	11.1	0.312	+ 2.052 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	B	11.2	0.133	+ 1.934 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	B	10.6	0.042	+ 1.064 D/V

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.1 Worst Case Level Of Service: C[16.4]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0	0	0 0	1 0 0	0 0	1 0	0	1 0 0 0
Volume Module:								
Base Vol:	2		0	0	6		4	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	2		0	0	6		4	
Added Vol:	0		0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0
Initial Fut:	2	0	0	0	12	0	4	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.59 0.59	0.59	0.59 0.59	0.59 0.59	0.59 0.59	0.59	0.59 0.59	0.59
PHF Volume:	4		0	0	21		7	
Reduct Vol:	0		0	0	0		0	
FinalVolume:	4	0	0	0	21	0	7	0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	6.5	6.2	6.5	xxxxx
FollowUpTim:	2.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	4.0	3.3	4.0	xxxxx
Capacity Module:								
Cnflict Vol:	2 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	595	2	592	xxxxx
Potent Cap.:	1634 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	420	1088	422	xxxxx
Move Cap.:	1634 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	331	1088	332	xxxxx
Volume/Cap:	0.18 xxxx xxxx	xxxx	xxxx xxxx	xxxx	xxxx	0.03	0.02	xxxx
Level Of Service Module:								
2Way95thQ:	0.6 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	xxxx	xxxx	xxxxx
Control Del:	7.7 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	*	LT - LTR - RT	*	LT - LTR - RT	*	LT - LTR - RT	*
Shared Cap.:	xxxx xxxx xxxxx	*	xxxx xxxx xxxxx	*	xxxx xxxx	643	331	xxxx xxxxx
SharedQueue:	xxxxx xxxx xxxxx	*	xxxxx xxxx xxxxx	*	xxxxx xxxx	0.1	0.2	xxxx xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx	*	xxxxx xxxx xxxxx	*	xxxxx xxxx	10.9	16.4	xxxx xxxxx
Shared LOS:	*	*	*	*	*	B	*	
ApproachDel:	xxxxxx	*	xxxxxx	*	10.9		16.4	*
ApproachLOS:	*	*	*	*	B		C	*

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: B[11.1]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0	0	0 0	1 0 1	0 0	0 0	0	1 0 0 1
Volume Module:								
Base Vol:	52		45	0	0		0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	56		49	0	0		0	
Added Vol:	51	29	0	0	0	0	11	0 12
PasserByVol:	5 0	0	0 2	0	0	0	173	0 115
Initial Fut:	4 107	0	0 3	0 51	0	0	184	0 127
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.78 0.78	0.78	0.78 0.78	0.78 0.78	0.78 0.78	0.78	0.78 0.78	0.78
PHF Volume:	137		65	0	0		235	0
Reduct Vol:	12 0		0 41	0 0	0		0	162
FinalVolume:	137	0	65	0 0	0	0	235	0 162
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx xxxxx	3.5	4.0	3.3
Capacity Module:								
Cnflict Vol:	41 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx xxxx xxxxx	235	202	137
Potent Cap.:	1581 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx xxxx xxxxx	758	697	917
Move Cap.:	1581 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx xxxx xxxxx	753	692	917
Volume/Cap:	0.01 xxxx xxxx	xxxx	xxxx xxxx	xxxx	xxxx xxxx xxxx	0.31	0.00	0.18
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx xxxx xxxxx	xxxx	xxxx	0.6
Control Del:	7.3 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx xxxx xxxxx	xxxxx	xxxx	9.8
LOS by Move:	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	*	LT - LTR - RT	*	LT - LTR - RT	*	LT - LTR - RT	*
Shared Cap.:	xxxx xxxx xxxxx	*	xxxx xxxx xxxxx	*	xxxx xxxx xxxxx	753	xxxx	xxxxx
SharedQueue:	0.0 xxxx xxxxx	*	xxxxx xxxx xxxxx	*	xxxxx xxxx xxxxx	1.3	xxxx	xxxxx
Shrd ConDel:	7.3 xxxx xxxxx	*	xxxxx xxxx xxxxx	*	xxxxx xxxx xxxxx	11.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	
ApproachDel:	xxxxxx	*	xxxxxx	*	xxxxxx		11.1	*
ApproachLOS:	A	*	*	*	*		B	*

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 3.4 Worst Case Level Of Service: B[11.2]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 1	0	0	1 0	0	1	0	0 0	0
Volume Module:												
Base Vol:	55	12	0	6	4	0						
Growth Adj:	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08
Initial Bse:	59	13	0	6	4	0						
Added Vol:	4	44	55	0	51	0	76	0	0			
PasserByVol:	0	0	3	173	0	0	0	0	0			
Initial Fut:	0	63	0	16	228	0	57	0	80	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
PHF Adj:	0.80 0.80	0.80	0.80	0.80 0.80	0.80	0.80	0.80 0.80	0.80	0.80	0.80 0.80	0.80	0.80
PHF Volume:	79	20	285	0	72	0	101	0	0			
Reduct Vol:	0	62	0	0	0	0	0	0	0			
FinalVolume:	79	20	285	0	72	0	101	0	0			
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1	xxxx xxxxx	6.4	6.5	6.2	xxxxx xxxx xxxxx					
FollowUpTim:	xxxxx xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	xxxxx xxxx xxxxx					
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	79	xxxx xxxxx	436	405	285	xxxx xxxx xxxxx					
Potent Cap.:	xxxx xxxx xxxxx	1532	xxxx xxxxx	582	538	758	xxxx xxxx xxxxx					
Move Cap.:	xxxx xxxx xxxxx	1532	xxxx xxxxx	576	531	758	xxxx xxxx xxxxx					
Volume/Cap:	xxxx xxxx xxxx	0.01	xxxx xxxx	0.12	0.00	0.13	xxxx xxxx xxxx					
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	0.0	xxxx xxxxx	xxxx xxxx		0.5	xxxx xxxx xxxxx					
Control Del:	xxxxx xxxx xxxxx	7.4	xxxx xxxxx	xxxxx xxxx		10.5	xxxxx xxxx xxxxx					
LOS by Move:	*	A	*	*	*	B	*	*	*			
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		576 xxxx xxxxx			xxxx xxxx xxxxx					
SharedQueue:	xxxxx xxxx xxxxx	0.0	xxxx xxxxx	0.4	xxxx xxxxx		xxxxx xxxx xxxxx					
Shrd ConDel:	xxxxx xxxx xxxxx	7.4	xxxx xxxxx	12.1	xxxx xxxxx		xxxxx xxxx xxxxx					
Shared LOS:	*	A	*	B	*		*	*				
ApproachDel:	xxxxxx	xxxxxx		11.2			xxxxxx					
ApproachLOS:	*	*		B			*					

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[10.6]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0	0		1! 0 0	0	0 0 1! 0 0
Volume Module:												
Base Vol:	55	4	1	1	2	2						
Growth Adj:	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08
Initial Bse:	59	4	1	1	2	2						
Added Vol:	0	17	52	249	0	0	23	0	0			
PasserByVol:	0	0	0	8	0	0	0	0	0			
Initial Fut:	59	0	4	250	0	2	0	0	2	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00
PHF Adj:	0.84 0.84	0.84	0.84	0.84 0.84	0.84	0.84	0.84 0.84	0.84	0.84	0.84 0.84	0.84	0.84
PHF Volume:	71	5	297	11	3	3						
Reduct Vol:	0	21	0	62	0	0	27	0	0			
FinalVolume:	71	5	297	11	3	3						
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	4.1	xxxx xxxxx	7.1	6.5	6.2	7.1	6.5	6.2			
FollowUpTim:	2.2 xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:												
Cnflict Vol:	359 xxxx xxxxx	91	xxxx xxxxx	309	314	210	305	452	81			
Potent Cap.:	1211 xxxx xxxxx	1517	xxxx xxxxx	648	605	835	651	506	985			
Move Cap.:	1211 xxxx xxxxx	1517	xxxx xxxxx	638	602	835	647	504	985			
Volume/Cap:	0.00 xxxx xxxx	0.00	xxxx xxxx	0.02	0.00	0.00	0.04	0.01	0.01			
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	0.0	xxxx xxxxx	xxxx xxxx		xxxx	xxxx xxxx		xxxx			
Control Del:	8.0 xxxx xxxxx	7.4	xxxx xxxxx	xxxxx xxxx		xxxxx	xxxxx xxxx		xxxxx			
LOS by Move:	*	A	*	*	*	B	*	*	B			
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		xxxx xxxx xxxxx			668 xxxxx xxxxx		682 xxxxx			
SharedQueue:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			0.1 xxxxx xxxxx		0.2 xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			10.5 xxxxx xxxxx		10.6 xxxxx			
Shared LOS:	*	*	*	*	*		B		B			
ApproachDel:	xxxxxx	xxxxxx					10.5		10.6			
ApproachLOS:	*	*					B		B			

Note: Queue reported is the number of cars per lane.

With Project

Scenario Report

Scenario:	Existing Plus Ambient PM
Command:	Existing Plus Ambient PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0C005	B	10.2	0.229	+ 1.637 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	B	12.5	0.124	+ 2.925 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	B	13.8	0.144	+ 4.148 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	B	12.9	0.381	+ 3.021 D/V

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.7 Worst Case Level Of Service: B[10.2]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 0 1 0 0		0 0 1 0 0		0 0 1! 0 0	
Volume Module:								
Base Vol:	5	2	0	4	0	168	0	1
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	5	2	0	4	0	168	0	1
Added Vol:	0	0	0	0	1	0	0	0
PasserByVol:	1	0	0	0	0	0	0	0
Initial Fut:	6	2	0	4	1	168	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
PHF Volume:	8	3	0	6	0	248	0	2
Reduct Vol:	10	0	0	0	2	0	0	0
FinalVolume:	0	3	0	6	0	248	0	2
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx 6.5	6.2	7.1	6.5 6.2
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx 4.0	3.3	3.5	4.0 3.3
Capacity Module:								
Cnflict Vol:	6 xxxx xxxxx		xxxx xxxx xxxxx		xxxx 38	6	161	37
Potent Cap.:	1628 xxxx xxxxx		xxxx xxxx xxxxx		xxxx 858	1082	808	860 1078
Move Cap.:	1628 xxxx xxxxx		xxxx xxxx xxxxx		xxxx 852	1082	618	854 1078
Volume/Cap:	0.01 xxxx xxxx		xxxx xxxx xxxx		xxxx 0.00	0.23	0.01	0.00 0.00
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	
Control Del:	7.2 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx	
LOS by Move:	*		*		*		*	
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxx	1080	xxxx	693 xxxxx
SharedQueue:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxx	0.9	xxxxx	0.0 xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxx	9.3	xxxxx	10.2 xxxxx
Shared LOS:	*		*		*	A		B
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		10.2	
ApproachLOS:	*		*		*		B	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B[12.5]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	75	0	0	1508	10	0	0	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	81	0	0	1508	11	0	0	0
Added Vol:	3	0	49	0	50	0	45	0 11
PasserByVol:	76	0	115	0	0	0	0	0
Initial Fut:	84	0	164	0	61	0	5	0 3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	100	0	195	0	73	0	60	0 16
Reduct Vol:	98	0	0	0	0	0	0	0
FinalVolume:	100	0	195	0	73	0	60	0 16
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx xxxxx		xxxx xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx xxxxx		xxxx xxxxx	3.5	4.0	3.3
Capacity Module:								
Cnflict Vol:	195 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	529	492	100
Potent Cap.:	1390 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	514	480	961
Move Cap.:	1390 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	485	444	961
Volume/Cap:	0.07 xxxx xxxx		xxxx xxxx xxxx		xxxx xxxx xxxx	0.12	0.00	0.02
Level Of Service Module:								
2Way95thQ:	0.2 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx	0.1
Control Del:	7.8 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx	8.8
LOS by Move:	*		*		*		*	
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		485	xxxx xxxxx
SharedQueue:	0.2 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		0.4	xxxx xxxxx
Shrd ConDel:	7.8 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		13.5	xxxx xxxxx
Shared LOS:	*		*		*		*	
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		12.5	
ApproachLOS:	*		*		*		B	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 3.1 Worst Case Level Of Service: B[13.8]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0 1! 0		0	1		0	0 0		0	1	
Volume Module:												
Base Vol:	35			12			43			13		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	38			13			46			14		
Added Vol:	76	58		115	79		0	0		0	0	
PasserByVol:	0	0		173			0	3		4		
Initial Fut:	114	58		288	79		46	3		18	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	131			148			57			21		
Reduct Vol:	0			0	97		0	0		0	0	
FinalVolume:	131	267		148	97		57	0		21	0	
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5		6.2	xxxxx	xxxx xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0		3.3	xxxxx	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	131	xxxx	xxxxx	657	523		97	xxxx	xxxx xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1466	xxxx	xxxxx	433	461		965	xxxx	xxxx xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1466	xxxx	xxxxx	397	411		965	xxxx	xxxx xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	xxxx	0.14	0.00		0.02	xxxx	xxxx xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx		0.1	xxxx	xxxx xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx		8.8	xxxxx	xxxx xxxxx
LOS by Move:	*			A	*		*	*		A	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	397	xxxx	xxxxx		xxxx	xxxx xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	0.5	xxxx	xxxxx		xxxxx	xxxx xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	15.6	xxxx	xxxxx		xxxxx	xxxx xxxxx
Shared LOS:	*			A	*		C	*			*	
ApproachDel:	xxxxxx			xxxxxx			13.8				xxxxxx	
ApproachLOS:	*			*			B				*	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: B[12.9]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0		0	0 1! 0		0	0 0		0	0 1! 0	
Volume Module:												
Base Vol:	86			2			1	1		0		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	93			2			1	1		0		
Added Vol:	0			2	90		248	0		0		
PasserByVol:	0	0		0			9	0		0	8	
Initial Fut:	93	0		2	90		258	0		0	8	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	104			2	100		279			0		
Reduct Vol:	0			0	0		0	0		0	0	
FinalVolume:	104	0		2	100		279	0		0	8	
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	
Capacity Module:												
Cnflict Vol:	112	xxxx	xxxxx	111	xxxx	xxxxx	223	xxxx	xxxxx	221	227	
Potent Cap.:	1491	xxxx	xxxxx	1491	xxxx	xxxxx	737	xxxx	xxxxx	739	676	
Move Cap.:	1491	xxxx	xxxxx	1491	xxxx	xxxxx	733	xxxx	xxxxx	738	674	
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.38	xxxx	xxxx	0.01	0.00	
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	1.8	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.4	xxxx	xxxxx	7.4	xxxx	xxxxx	12.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			A	*		B	*			*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT		LT -	LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	0.0 xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	9.6 xxxxx
Shared LOS:	*			*			*				*	A
ApproachDel:	xxxxxx			xxxxxx			12.9				9.6	
ApproachLOS:	*			*			B				A	

Note: Queue reported is the number of cars per lane.

APPENDIX D
CUMULATIVE INTERSECTION ANALYSIS WORKSHEET

Scenario Report

Scenario: Ex Plus Am Plus CP AM

Command: Existing Plus Am+ CP AM
Volume: Existing AM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation:
Trip Distribution: AMALL
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base v/ c	Future LOS	Future Del/ Veh	Future v/ c	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	B	14.2	0.147	+ 5.130 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	C	19.2	0.656	+10.153 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	D	34.7	0.885	+25.485 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	C	23.3	0.142	+13.769 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.0 Worst Case Level Of Service: B[14.2]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	1	0	0	0	0	0	1! 0	0
Volume Module:												
Base Vol:		2			0			0			4	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		2			0			6			4	
Added Vol:		0			0			0			0	
PasserByVol:	635	0	3	1	1	0	0	0	5	3	5	0
Initial Fut:		2	4	0	0	0	0	0	5	3	4	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:		4			2			0			16	
Reduct Vol:		0	12		0	2	0	0	0	9	0	18
FinalVolume:		4			2			0			16	
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	16	xxxx	xxxxx	xxxx	500	2	506	479	10
Potent Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	476	1088	480	617	1078
Move Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	395	1088	404	611	1078
Volume/Cap:	0.15	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.02	0.01	0.04	0.02	0.00
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.6	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			A			*		*	*		*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	665	xxxx	419	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.1	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	10.6	xxxxx	14.2	xxxxx
Shared LOS:		*			A		*	*	B		B	
ApproachDel:		xxxxxx			xxxxx			10.6			14.2	
ApproachLOS:		*			*			B			B	

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 13.3 Worst Case Level Of Service: C[19.2]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
Volume Module:																	
Base Vol:		52			0			45			0			0			
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		56			0			49			0			0			
Added Vol:		145			29			8			0			11			12
PasserByVol:	11	0	0	0	14	0	0	0	0	0	0	0	295	0	391		
Initial Fut:		201			43			57			0			306			403
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:		258			55			72			0			392			516
Reduct Vol:	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		258			55			72			0			392			516
Critical Gap Module:																	
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2					
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3					
Capacity Module:																	
Cnflict Vol:	55	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	391	355	258					
Potent Cap.:	1563	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	617	574	786					
Move Cap.:	1563	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	611	566	786					
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.64	0.00	0.66					
Level Of Service Module:																	
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	5.0					
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	17.9					
LOS by Move:	*			*		*	*		*	*		*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	611	xxxx	xxxxx					
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.6	xxxx	xxxxx					
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	20.8	xxxx	xxxxx					
Shared LOS:		*			*		*	*			*						
ApproachDel:		xxxxxx			xxxxx			xxxxx			19.2						
ApproachLOS:		*			*			*			C						

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 18.1 Worst Case Level Of Service: D[34.7]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 0 0	0	1	0 1	0	1	0 0 0	0	1
Volume Module:												
Base Vol:	55	12	0	6	4	0	0	0	0	0	0	0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59	13	0	6	4	0	0	0	0	0	0	0
Added Vol:	28	12	0	128	434	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	25	0	134	438	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	109	31	0	168	549	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	109	31	0	168	549	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1	xxxx xxxxx	6.4	6.5	6.2	xxxxx xxxx xxxxx					
FollowUpTim:	xxxxx xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	xxxxx xxxx xxxxx					
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	109	xxxx xxxxx	660	614	442	xxxx xxxx xxxxx					
Potent Cap.:	xxxx xxxx xxxxx	1494	xxxx xxxxx	431	410	620	xxxx xxxx xxxxx					
Move Cap.:	xxxx xxxx xxxxx	1494	xxxx xxxxx	424	401	620	xxxx xxxx xxxxx					
Volume/Cap:	xxxx xxxx xxxx	0.02	xxxx xxxx	0.40	0.00	0.89	xxxx xxxx xxxx					
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	0.1	xxxx xxxxx	xxxx xxxx		10.6	xxxx xxxx xxxxx					
Control Del:	xxxxx xxxx xxxxx	7.5	xxxx xxxxx	xxxxx xxxx		39.6	xxxxx xxxx xxxxx					
LOS by Move:	*	A	*	*	*	E	*	*	*			
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		424	xxxx xxxxx		xxxx xxxx xxxxx					
SharedQueue:	xxxxx xxxx xxxxx	0.1	xxxx xxxxx	1.9	xxxx xxxxx		xxxxx xxxx xxxxx					
Shrd ConDel:	xxxxx xxxx xxxxx	7.5	xxxx xxxxx	19.0	xxxx xxxxx		xxxxx xxxx xxxxx					
Shared LOS:	*	A	*	C	*		*					
ApproachDel:	xxxxxx	xxxxxx		34.7			xxxxxx					
ApproachLOS:	*	*		D			*					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[23.3]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0	1! 0	0	0	0	1! 0
Volume Module:												
Base Vol:	55	4	1	1	1	2	2	2	2	2	2	2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59	4	1	1	1	2	2	2	2	2	2	2
Added Vol:	57	52	1	0	0	0	23	0	0	0	0	0
PasserByVol:	0	1	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	57	2	1	1	2	25	2	2	2	2	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	138	68	2	1	1	3	30	3	3	3	3	3
Reduct Vol:	0	0	0	0	0	0	27	0	0	0	0	0
FinalVolume:	138	68	2	1	1	3	3	3	3	3	3	3
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	4.1	xxxx xxxxx	7.1	6.5	6.2	6.5					
FollowUpTim:	2.2 xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	4.0	3.3				
Capacity Module:												
Cnflict Vol:	931 xxxx xxxxx	159	xxxx xxxxx	1100	1104	930	1095	1095				
Potent Cap.:	743 xxxx xxxxx	1433	xxxx xxxxx	191	213	327	216	149				
Move Cap.:	743 xxxx xxxxx	1433	xxxx xxxxx	187	211	327	214	904				
Volume/Cap:	0.00 xxxx xxxx	0.00	xxxx xxxx	0.01	0.00	0.01	0.01	0.01				
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	0.0	xxxx xxxxx	xxxx xxxx	xxxxx	xxxx	xxxx xxxxx					
Control Del:	9.9 xxxx xxxxx	7.5	xxxx xxxxx	xxxxx xxxx	xxxxx	xxxx	xxxxx xxxx xxxxx					
LOS by Move:	*	A	*	*	*	*	*					
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		xxxx	261	xxxxx	xxxx	235	xxxxx			
SharedQueue:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		xxxxx	0.0	xxxxx	xxxxx	0.6	xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		19.0	xxxxx	xxxxx	23.3	xxxxx				
Shared LOS:	*	*	*	*	*		C					
ApproachDel:	xxxxxx	xxxxxx		10.0			23.3					
ApproachLOS:	*	*		C			C					

Note: Queue reported is the number of cars per lane.

Scenario Report

Scenario: Ex Plus Am Plus CP PM

Command: Existing Plus Am+ CP PM
Volume: Existing PM
Geometry: Existing
Impact Fee: Default Impact Fee
Trip Generation:
Trip Distribution: PMALL
Paths: Default Path
Routes: Default Route
Configuration: Default Configuration

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	B	10.0	0.187	+ 1.413 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	F	257.1	1.288	+247.509 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	F	294.0	1.306	+284.397 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	C	21.8	0.039	+11.932 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.2 Worst Case Level Of Service: B[10.0]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	1	0	0	0	0	0	1! 0	0
Volume Module:												
Base Vol:		5			0			0			0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		5			0			2			0	
Added Vol:		0			0		0	0	1		0	
PasserByVol:	1	0	2	1	4	0	0	0	0	3	0	1
Initial Fut:	3	5	6	0	0	0	0	0	0	5	0	1
User Adj:	0	1.00	0	1.00	1.00	0	1.00	1.00	0	1.00	1.00	0
PHF Adj:	1.00	0.68	1.00	0.68	0.68	1.00	0.68	0.68	1.00	0.68	0.68	1.00
PHF Volume:	4	8	8	0	1	0	0	0	0	8	0	4
Reduct Vol:		0	12		1	0		0	2		0	
FinalVolume:	6	8	0	0	6	0	0	0	0	12	0	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	6	xxxx	xxxxx	20	xxxx	xxxxx	xxxx	41	6	137	35	
Potent Cap.:	1628	xxxx	xxxxx	1609	xxxx	xxxxx	xxxx	855	1082	838	861	1072
Move Cap.:	1628	xxxx	xxxxx	1609	xxxx	xxxxx	xxxx	851	1082	679	857	1072
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.00	0.19	0.02	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			A			*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1080	xxxx	733	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.7	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	9.1	xxxxx	10.0	xxxxx
Shared LOS:		*			A		*	*	A		B	
ApproachDel:	xxxxxx			xxxxxx			9.1			10.0		
ApproachLOS:	*			*			A			B		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 19.3 Worst Case Level Of Service: F[257.1]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Channel			Include		
Lanes:	0	1	0	0	0	0	1	0	1	0	0	0
Volume Module:												
Base Vol:		75			0			10			0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		81			0			11			0	
Added Vol:		11			0	0	49	128	0	0	45	0
PasserByVol:	0	0	0	0	409	0	0	0	0	0	0	0
Initial Fut:	0	92	0	0	0	0	139	0	0	0	0	0
User Adj:	1.00	1.00	0	1.00	1.00	0	1.00	1.00	0	1.00	1.00	0
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:		110			0	0	166	0	0	0	0	0
Reduct Vol:		0			0	0		0	0	0	54	0
FinalVolume:	0	110	0	0	0	0	166	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.5	
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	4.0	6.2
Capacity Module:										3.5		3.3
Cnflict Vol:	546	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1757	1674	
Potent Cap.:	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		97	110
Move Cap.:	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	94	30	949
Volume/Cap:	0.49	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.29	0.00	0.03
Level Of Service Module:												
2Way95thQ:	2.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	
Control Del:	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.1
LOS by Move:	*			*			*	*	*	*	*	8.9
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	42	xxxx	xxxxx
SharedQueue:	2.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	5.3	xxxx	xxxxx
Shrd ConDel:	11.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	387.3	xxxx	xxxxx
Shared LOS:		*			*		*	*		*		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			257.1		
ApproachLOS:	B	*		*			*			F		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 18.4 Worst Case Level Of Service: F[294.0]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0 1! 0		0	1 0	0	0	1 0		0	0 0 0	
Volume Module:												
Base Vol:	35	12		0	43		13		0			
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	38	13		0	46		14		0			
Added Vol:	422	391	79	0	9	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0			
Initial Fut:	460	404	0	0	55	0	14	0	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	530	466		0	64	0	16	0	0			
Reduct Vol:	0	0		0	0	0	0	0	0			
FinalVolume:	530	466		0	64	0	16	0	0			
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1	xxxx xxxxx	6.4	6.5	6.2	xxxxx xxxx xxxxx					
FollowUpTim:	xxxxx xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	xxxxx xxxx xxxxx					
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	530	xxxx xxxxx	1761	1573	111	xxxx xxxx xxxxx					
Potent Cap.:	xxxx xxxx xxxxx	1047	xxxx xxxxx	94	111	948	xxxx xxxx xxxxx					
Move Cap.:	xxxx xxxx xxxxx	1047	xxxx xxxxx	49	44	948	xxxx xxxx xxxxx					
Volume/Cap:	xxxx xxxx xxxx	0.44	xxxx xxxx	1.31	0.00	0.02	xxxx xxxx xxxx					
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	2.3	xxxx xxxxx	xxxx	xxxx	0.1	xxxx xxxx xxxxx					
Control Del:	xxxxx xxxx xxxxx	11.2	xxxx xxxxx	xxxxx	xxxx	8.9	xxxxx xxxx xxxxx					
LOS by Move:	*	B	*	*	*	A	*	*	*			
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		49	xxxx	xxxxx	xxxx xxxx xxxxx					
SharedQueue:	xxxxx xxxx xxxxx	2.3	xxxx xxxxx	5.9	xxxx	xxxxx	xxxxx xxxx xxxxx					
Shrd ConDel:	xxxxx xxxx xxxxx	11.2	xxxx xxxxx	366.2	xxxx	xxxxx	xxxxx xxxx xxxxx					
Shared LOS:	*	B	*	F			*	*	*			
ApproachDel:	xxxxxx	xxxxxx		294.0			xxxxxx					
ApproachLOS:	*	*		F			*					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: C[21.8]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0		0	0 1! 0		0	0 0		0	0 1! 0	
Volume Module:												
Base Vol:	86	2		1	1	0			0			
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	93	2		1	1	0			0			
Added Vol:	690	1	90	0	0	0	0	8	0			
PasserByVol:	0	1	0	0	0	0	0	0	0			
Initial Fut:	783	3	0	0	1	0	0	8	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	878	4	120	1	1	0			0			
Reduct Vol:	0	0	0	0	0	0	0	0	0			
FinalVolume:	878	4	120	1	1	0	0	8	0			
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	4.1	xxxx xxxxx	7.1	xxxx	xxxxx			6.5			
FollowUpTim:	2.2 xxxx xxxxx	2.2	xxxx xxxxx	3.5	xxxx	xxxxx			4.0			
Capacity Module:												
Cnflict Vol:	121 xxxx xxxxx	885	xxxx xxxxx	1013	xxxx	xxxxx	1011	1012				
Potent Cap.:	1479 xxxx xxxxx	773	xxxx xxxxx	219	xxxx	xxxxx			241			
Move Cap.:	1479 xxxx xxxxx	773	xxxx xxxxx	215	xxxx	xxxxx	220	240	349			
Volume/Cap:	0.00 xxxx xxxx	0.00	xxxx xxxx	0.01	xxxx	xxxx	0.04	0.00	0.01			
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	0.0	xxxx xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	7.4 xxxx xxxxx	9.7	xxxx xxxxx	21.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	A	*	*	C	*	*	*	*			
Movement:	LT - LTR - RT	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx		xxxx	xxxx	xxxxx	xxxx	253	xxxxx			
SharedQueue:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx		xxxxx	xxxx	xxxxx	xxxxx	20.0	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	C	*			
ApproachDel:	xxxxxx	xxxxxx		21.8			20.0					
ApproachLOS:	*	*		C			C					

Note: Queue reported is the number of cars per lane.

With Project

Scenario Report

Scenario:	Ex Plus Am Plus CP AM
Command:	Existing Plus Am+ CP AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0C011	E	40.1	0.318	+31.071 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	F	70.6	1.122	+61.616 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	F	163.9	1.377	+154.620 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	D	29.4	0.179	+19.876 D/V

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 9.9 Worst Case Level Of Service: E[40.1]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 1 0 0 0		0 0 1 0 0		0 1! 0 0 0	
Volume Module:								
Base Vol:	2		0		6		4	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	2		0		6		4	
Added Vol:	0		0	0	9	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0
Initial Fut:	2	0	0	0	15	0	4	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.59 0.59	0.59	0.59 0.59	0.59	0.59 0.59	0.59	0.59 0.59	0.59
PHF Volume:	4		0		26		7	
Reduct Vol:	0	0	0	0	0	0	0	0
FinalVolume:	4	0	0	0	26	0	7	0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx	xxxxx	6.5	6.2	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx	xxxxx	4.0	3.3	4.0	3.3
Capacity Module:								
Cnflict Vol:	2 xxxx xxxxx		0 xxxx xxxxx	xxxx	1062	0	1056	
Potent Cap.:	1634 xxxx xxxxx		1615 xxxx xxxxx	xxxx	225	1088	227	1078
Move Cap.:	1634 xxxx xxxxx		1615 xxxx xxxxx	xxxx	124	1088	125	1078
Volume/Cap:	0.32 xxxx xxxx		0.00 xxxx xxxx	xxxx	0.07	0.02	0.06	0.00
Level Of Service Module:								
2Way95thQ:	1.4 xxxx xxxxx		0.0 xxxx xxxxx	xxxx	xxxx xxxxx		xxxx xxxx xxxxx	
Control Del:	8.2 xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx xxxxx		xxxx xxxx xxxxx	
LOS by Move:	*		A *	*	* *		*	
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx	xxxx	xxxx	362	xxxx 129	xxxxx
SharedQueue:	xxxxx xxxx xxxxx		0.0 xxxx xxxxx	xxxxx	xxxx	0.3	xxxxx 0.7	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx	16.0	xxxxx 40.1	xxxxx
Shared LOS:	*		A *	*	*	C	* E	
ApproachDel:	xxxxxx		xxxxxx		16.0		40.1	
ApproachLOS:	*		*		C		* E	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 51.3 Worst Case Level Of Service: F[70.6]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	52		45		0		0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	56		49		0		0	
Added Vol:	196		0	29	10	0	0	0
PasserByVol:	0	0	0	18	0	0	0	0
Initial Fut:	252	0	0	0	59	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.78 0.78	0.78	0.78 0.78	0.78	0.78 0.78	0.78	0.78 0.78	0.78
PHF Volume:	323		75		0		0	
Reduct Vol:	0	0	0	60	0	0	0	0
FinalVolume:	323	0	0	75	0	0	0	0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx		6.4	6.5
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx		3.5	4.0 3.3
Capacity Module:								
Cnflict Vol:	60 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx	xxxxx	473	435
Potent Cap.:	1556 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx	xxxxx	553	517 323
Move Cap.:	1556 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx	xxxxx	546	508 723
Volume/Cap:	0.02 xxxx xxxx		xxxx xxxx	xxxx	xxxx xxxx	xxxx	1.12	0.00 0.92
Level Of Service Module:								
2Way95thQ:	0.1 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx	xxxxx	xxxx xxxx	12.6
Control Del:	7.4 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxx	xxxxx	xxxxx xxxx	40.7
LOS by Move:	*		* *	*	* *	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx	xxxx	xxxx xxxx	xxxxx	546 xxxx	xxxxx
SharedQueue:	0.1 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx xxxx	xxxxx	19.9 xxxx	xxxxx
Shrd ConDel:	7.4 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx xxxx	xxxxx	103.0 xxxx	xxxxx
Shared LOS:	*		*	*	*	*	*	
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		70.6	
ApproachLOS:	A		*		*		F * F	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 80.7 Worst Case Level Of Service: F[163.9]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0 1! 0		0	1! 0		0	0 0		0	0 0	
Volume Module:												
Base Vol:	55			12			0	6		4		0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			13			0	6		4		0
Added Vol:	32	44		15	471		0	179	0	510		0
PasserByVol:	0	0	34				0		0		0	0
Initial Fut:	91		0	28		0	0	185	0	514	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	114			35			0	232		644		0
Reduct Vol:	0	98		0	658	0	0	0	0	0	0	0
FinalVolume:	114		0	35		0	0	232	0	644	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	114	xxxx	xxxxx	892	843	658	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1487	xxxx	xxxxx	315	303	468	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1487	xxxx	xxxxx	309	295	468	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.75	0.00	1.38	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	30.1	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	206.8	xxxxx	xxxx	xxxxx
LOS by Move:	*			A		*	*		F	*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	309	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	5.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	44.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*			A		*	E		*			*
ApproachDel:	xxxxxx			xxxxxx			163.9			xxxxxx		
ApproachLOS:	*			*			F			*		

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: D[29.4]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0		0	0 1! 0		0	1! 0 0		0	0 1! 0	
Volume Module:												
Base Vol:	55			4		1	1		2			2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			4		1	1		2			2
Added Vol:	57	17		52	249		0	23	0			0
PasserByVol:	0		0			0		8	0			0
Initial Fut:	116		0	56	250	0	9	0	2	0	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	138			67		297	11		3			3
Reduct Vol:	0	21		0	930		0	0	0	27	0	0
FinalVolume:	138		0	67		297	11	0	3	0		3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1227	xxxx	xxxxx	159	xxxx	xxxxx	1248	1252	1078	1243	1390	149
Potent Cap.:	575	xxxx	xxxxx	1433	xxxx	xxxxx	152	174	268	153	144	904
Move Cap.:	575	xxxx	xxxxx	1433	xxxx	xxxxx	147	173	268	150	143	904
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.07	0.00	0.01	0.18	0.02	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.3	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			A		*	*		*	*		*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	161	xxxxx	xxxx	186	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	0.8	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	29.3	xxxxx	xxxxx	29.4	xxxxx
Shared LOS:	*			*		*	*		*	*		D
ApproachDel:	xxxxxx			xxxxxx			29.3			29.4		
ApproachLOS:	*			*			D			D		

Note: Queue reported is the number of cars per lane.

With Project

Scenario Report

Scenario:	Ex Plus Am Plus CP PM
Command:	Existing Plus Am+ CP PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0C005	B	13.2	0.413	+ 4.617 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	F	OVRFL	XXXXX	+3506.453 D/
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	F	OVRFL	7.110	+2682.176 D/
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	F	212.2	1.307	+202.334 D/V

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 10.1 Worst Case Level Of Service: B[13.2]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 1 0 0 0		0 0 1 0 0		0 1! 0 0 0	
Volume Module:								
Base Vol:	5		0	0	2		0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	5		0	0	2		0	
Added Vol:	0		0	0	301		0	
PasserByVol:	1	0	2	1 4	0	0	3	0 1
Initial Fut:	9	5	6	0 0	0	0	303	5 0 1
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.68 0.68	0.68	0.68 0.68	0.68	0.68 0.68	0.68	0.68 0.68	0.68
PHF Volume:	8		1	0	446		0	
Reduct Vol:	15	0	12	0 6	0	0	12	0 3
FinalVolume:	0	8	0	1 0	0	446	0	0 0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx	xxxxx	6.5	6.2	7.1	6.5 6.2
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx	xxxxx	4.0	3.3	3.5	4.0 3.3
Capacity Module:								
Cnflict Vol:	6 xxxx xxxxx		20 xxxx xxxxx	xxxx	59	6	277	53
Potent Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	836	1082	679	842 1072
Move Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	827	1082	395	834 1072
Volume/Cap:	0.01 xxxx xxxx		0.00 xxxx xxxx	xxxx	0.00	0.41	0.03	0.00 0.00
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx	xxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxxx
Control Del:	7.2 xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxx xxxxx
LOS by Move:	*		A	*	*	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx	xxxx	xxxx	1081	xxxx	453 xxxxx
SharedQueue:	xxxxx xxxx xxxxx		0.0 xxxx xxxxx	xxxxx	xxxx	2.1	xxxxx	0.1 xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx	10.7	xxxxx	13.2 xxxxx
Shared LOS:	*		A	*	*	B		B
ApproachDel:	xxxxxx		xxxxxx		10.7		13.2	
ApproachLOS:	*		*		B		B	

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 194.6 Worst Case Level Of Service: F[3516.0]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	75		10		0		0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	81		11		0		0	
Added Vol:	14		178	0	0	0	45	0 11
PasserByVol:	695	0	0 524		0	0	0	0 16
Initial Fut:	901	95	189	0	0	0	5	0 0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.84 0.84	0.84	0.84 0.84	0.84	0.84 0.84	0.84	0.84 0.84	0.84
PHF Volume:	113		225		0		0	
Reduct Vol:	598	0	0 683		0	0	60	0 32
FinalVolume:	898	113	0	0	225	0	0	0 0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx		6.4	6.5 6.2
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx		3.5	4.0 3.3
Capacity Module:								
Cnflict Vol:	683 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		2106	1994 113
Potent Cap.:	919 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx			61 945
Move Cap.:	919 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		57	2 945
Volume/Cap:	0.65 xxxx xxxx		xxxx xxxx xxxx		xxxx xxxx xxxx		10.26	0.00 0.03
Level Of Service Module:								
2Way95thQ:	5.0 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx	xxxx 0.1
Control Del:	15.9 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx	xxxx 8.9
LOS by Move:	*		*	*	*	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		6	xxxx xxxxx
SharedQueue:	5.0 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		9.2	xxxx xxxxx
Shrd ConDel:	15.9 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		5382	xxxx xxxxx
Shared LOS:	*		*	*	*	*	*	
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		3516.0	
ApproachLOS:	*		*		*		F	*

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 121.8 Worst Case Level Of Service: F[2691.8]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 1	0	0	1 0	0	1	0	0 0	0
Volume Module:												
Base Vol:	35	12		43		0	13		0			
Growth Adj:	1.08 1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	38	13		46		0	14		0			
Added Vol:	498	506	79	11	0					0		
PasserByVol:	0 0	441	22	0	0		4	0		0	0	
Initial Fut:	0 536	519	101	0	57	0	18	0		0	0	
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87 0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	618	599		66		0	21		0			
Reduct Vol:	0	116	0	0			0		0			
FinalVolume:	0 618	599	0	66	0		21	0		0	0	
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx		
FollowUpTim:	xxxxx xxxx xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx		
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	618	xxxx	xxxxx	2219	1931	116	xxxx	xxxx	xxxxx		
Potent Cap.:	xxxx xxxx xxxxx	972	xxxx	xxxxx	49	67	941	xxxx	xxxx	xxxxx		
Move Cap.:	xxxx xxxx xxxxx	972	xxxx	xxxxx	9		941	xxxx	xxxx	xxxxx		
Volume/Cap:	xxxx xxxx xxxx	0.62	xxxx	xxxx	7.11	0.00	0.02	xxxx	xxxx	xxxx		
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	4.4	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx		
Control Del:	xxxxx xxxx xxxxx	14.5	xxxx	xxxxx	xxxxx	xxxx	8.9	xxxxx	xxxx	xxxxx		
LOS by Move:	*	B	*	*	*	*	A	*	*	*		
Movement:	LT - LTR - RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT		
Shared Cap.:	xxxx xxxx xxxxx	xxxx	xxxx	xxxxx	9	xxxx	xxxxx	xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx xxxx xxxxx	4.4	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx	14.5	xxxx	xxxxx	3534	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
Shared LOS:	*	B	*	*	F	*	*	*	*	*		
ApproachDel:	xxxxxx	xxxxx			2691.8			xxxxxx				
ApproachLOS:	*	*			F			*				

Note: Queue reported is the number of cars per lane.

With Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 45.4 Worst Case Level Of Service: F[212.2]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0	0	0	0	0 1! 0	0
Volume Module:												
Base Vol:	86	2		1	1		0		0			
Growth Adj:	1.08 1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	93	2		1	1		0		0			
Added Vol:	690	1	90	1	248	0	0		0			
PasserByVol:	1 0	1	17	9	0		0	8	0			
Initial Fut:	0 783	3	107	10	249	0	0	8	0			
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89 0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	878	4	120	11	279	0	0		0			
Reduct Vol:	0	0		0	0		0		0			
FinalVolume:	1 878	4	120	11	279	0	0	8	0			
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx	4.1	xxxx	xxxxx	7.1	xxxx	xxxxx	7.1	6.5	6.2		
FollowUpTim:	2.2 xxxx xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	xxxxx	3.5	4.0	3.3		
Capacity Module:												
Cnflict Vol:	131 xxxx xxxxx	885	xxxx	xxxxx	1018	xxxx	xxxxx	1016	1022	881		
Potent Cap.:	1467 xxxx xxxxx	773	xxxx	xxxxx	217	xxxx	xxxxx	218	238	349		
Move Cap.:	1467 xxxx xxxxx	773	xxxx	xxxxx	214	xxxx	xxxxx	217	237	349		
Volume/Cap:	0.00 xxxx xxxx	0.00	xxxx	xxxx	1.31	xxxx	xxxx	0.04	0.00	0.01		
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx	0.0	xxxx	xxxxx	15.1	xxxx	xxxxx	xxxx	xxxx	xxxxx		
Control Del:	7.5 xxxx xxxxx	9.7	xxxx	xxxxx	212.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx		
LOS by Move:	*	A	*	*	F	*	*	*	*	*		
Movement:	LT - LTR - RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT		
Shared Cap.:	xxxx xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	251	xxxxx		
SharedQueue:	xxxxx xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.1	xxxxx		
Shared LOS:	*	*	*	*	*	*	*	*	C			
ApproachDel:	xxxxxx	xxxxx			212.2			20.1				
ApproachLOS:	*	*			F			C				

Note: Queue reported is the number of cars per lane.

APPENDIX E
SCOPING AGREEMENT

Exhibit B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated February 2005.

Case No. Environment Impact Report No. S29 / Conditional Use Permit No. 3670 / Public Use Permit No. 913 / Blythe Mesa I Solar Project

Related Cases -
SP No.
EIR No. S29
GPA No. N/A
CZ No. N/A

Project Name: Blythe Mesa I Solar Project

Project Address: APNS: 821-110-004,821-120-025,821-120-026

Project Description: The Blythe Mesa Solar Project consists of construction and operation of a 485 megawatt (MW) alternating current solar photovoltaic (PV) electrical generating facility.

	Consultant	Developer
Name:	KOA Corporation	Renewable Resource Group
Address:	3190 C Shelby Street	5700 Wilshire Blvd Suite 330
	Ontario, CA 91764	Los Angeles CA 90036
Telephone:	909-890-9693	
Fax:	909-890-9694	

A. Trip Generation Source: (ITE 8th Edition or other)

Current GP Land Use	W-2-10, W-2-5, A-1-10, A-2-10	Proposed Land Use	N/A
Current Zoning	Controlled Development Areas	Proposed Zoning	N/A

Current Trip Generation	In	Out	Total	Proposed Trip Generation	In	Out	Total
AM Trips	0	0	0		~~412~~ 415	~~11~~ 14	~~423~~ 429
PM Trips	0	0	0		~~12~~ 15	~~411~~ 414	~~423~~ 429

Internal Trip Allowance ☐ Yes ☒ No (0 % Trip Discount)
Pass-By Trip Allowance ☐ Yes ☒ No (0 % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: (attach exhibit for detailed assignment)

N - % S - % E - % W - %

See Attachment

C. Background Traffic

Project Build-out Year: 2015 Annual Ambient Growth Rate: 2 %

Phase Year(s) Not Applicable
Other area projects to be analyzed: List developed with Kevin Tsang

Model/Forecast methodology growth rate per year from existing counts

Exhibit B – Scoping Agreement – Page 2

D. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

1. Riverside Dr & Neighbours Blvd
2. I-10 WB Ramps & Neighbours Blvd
3. I-10 EB Ramps & Neighbours Blvd
4. Seeley Ave & Neighbours Blvd
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

E. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

E. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries? ☒ Yes ☐ No

If so, name of City Jurisdiction: City of Blythe

F. Site Plan (please attach reduced copy)

G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)
(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

_____

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts September 2011

NOTE Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.

Recommended by:

George Ghossain — 5-15-2012
Consultant's Representative — Date

Approved Scoping Agreement:

_____ — 05/22/2012
Riverside County Transportation Department — Date

Scoping Agreement Submitted on 5-15-2012

Revised on 5-16-2012

Project Description

The proposed Blythe Mesa I Solar Project (Project) consists of construction and operation of a 485 megawatt (MW) alternating current solar photovoltaic (PV) electrical generating facility and associated infrastructure to provide site access and connection to the statewide electricity transmission grid. The Project is proposed to be located on approximately 3,660 acres in the Palo Verde Mesa region of Riverside County—3,587 for the solar field and 73 acres for the 230 kilovolt (kV) transmission line interconnect. The power produced by the Project would be conveyed to the local power grid via interconnection to the Southern California Edison Colorado River Substation, an approved new substation located south of Highway 10 and approximately four miles west of the Project site. The Project has secured a California Independent System Operator (CAISO) interconnection queue position sufficient for the size of the Project. The Project would produce enough energy to power approximately 180,000 households and progress the goals of the California Renewable Portfolio Standard (RPS) and other similar renewable programs in the state

Project Construction Trip Generation Forecast

The project is expected to generate a maximum of 20 truck deliveries per day for the 24 month peak construction period. Transport truck deliveries include material deliveries and equipments. The calculations below account for the heavier vehicles types such as trucks by converting truck trips to "passenger car equivalents". SANBAG CMP passenger car equivalents (PCEs) per truck trip was used in this analysis. Passenger car equivalents (PCEs) are used in roadway capacity analysis to convert a mixed vehicle flow into an equivalent passenger car flow. This calculation is relevant to capacity and level of service determination, lane requirements, and determining the effect of traffic on roadway operations.

In addition, based on information obtained from the project proponent, the project site will employ a workforce of approximately 300-500 workers. Construction of the project will take approximately 36 months with 24 months of peak construction period. The project will require an average construction workforce of 40 workers at the beginning of construction and a peak of 500 workers during the 24 month peak construction period of the solar array, substations, operation and maintenance buildings and the installation of 230 kV transmission line and fiber optic cable with a tapering of fewer employees thereafter. The workforce vehicle trips associated with construction were calculated based upon these assumptions. It is anticipated that most workers would be drawn from the Blythe/Palo Verde Valley region and the Desert Center region, with a smaller portion drawn from the Imperial Valley or Eastern Riverside County region.

Construction of the project will require the use and installation of heavy equipment and associated systems. Heavy equipment will be delivered via truck, using Neighbours Boulevard from I-10 to the north and south utilizing Riverside Drive and Seeley Avenue. Anticipated average daily material deliveries would consist of about 20 truck deliveries per day for the peak 24 month construction period.

Peak Hour Trip Generation Forecast

For purposes of forecasting future peak hour trip generation, it is assumed that the majority of the daily project trips will occur during daylight hours. It is assumed that each employee arrives during the AM peak hour and departs during the PM peak hour and that some miscellaneous trips occur during this time. It is also assumed that truck trips will occur randomly over a 10-hour workday. Based on these assumptions, a daily and peak hour trip generation calculation is provided below.

Employee Trips

It is estimated that 500 employees will work on the site during the peak construction period. To evaluate a worst-case scenario, it is assumed that 300 employees arrive alone and 200 employees will carpool. In addition it is assumed that approximately 42 employees go to lunch or run some other errand therefore creating additional trips.

- 300 employees will drive alone = 300 inbound trips in the AM and 300 outbound trips in the PM
- 200 employees carpool (assumed 2 in a carpool) = 100 inbound trips in the AM and 100 outbound trips in the PM
- 42 employees go to lunch/run errands = 42 additional inbound and 42 additional outbound trips during the day

AM Peak Hour: 400 inbound employee trips

PM Peak Hour: 400 outbound employee trips

Total trips = (400*2) + (42*2) = 884 daily employee trips

On-site work hours would be from 7:00 a.m. to 7:00 p.m. During the installation period, construction workers are projected to be onsite five days per week, year round. Due to weather or other major type delays, times may shift to start as early as 5:00 a.m. and end as late as 8:00 p.m., as well as continue into the weekends. The construction PM peak hour for the project would be expected to occur with the departure of personnel at, 7:00PM. This does not coincide with the PM peak hour of the adjacent street, which occurs between 4PM and 6PM; however to be conservative, the project PM peak hour trip generation will be analyzed during the PM peak hour of the adjacent street traffic.

Additionally, trips generated from normal construction activities including activities of supervisors, activities of construction representatives, and delivery of supplies and equipment will also be analyzed during the PM peak hour of the adjacent street traffic.

Truck Trips

For the purposes of forecasting, it is assumed that 20 trucks per day will arrive and depart the site per day to deliver materials and equipment. These trips will likely occur randomly during the day, assuming a 10-hour day.

- 40 daily two-way truck trips

Mix of fleet
Light Duty Truck: 18% (7 trucks)
Medium Duty Truck: 18% (7 trucks)
Heavy Duty Truck: 64% (26 trucks)

} cite the source for the truck mix

PCE Factors
Light Duty Truck (1.5 PCE): 11 trucks
Medium Duty Truck (2.0 PCE): 14 trucks
Heavy Duty Truck (3.0 PCE): 78 trucks

- 103 PCE truck trips / 10-hour day = 11 PCE truck trips during the AM peak hour and 11 PCE truck trips during the PM peak hour.

AM Peak Hour: 6 inbound and 5 outbound truck PCE trips
PM Peak Hour: 6 inbound and 5 outbound truck PCE trips

Additional Work Related Trips

For the purposes of forecasting, it is assumed that other trips associated with the activities of supervisors, inspectors and vendors would be equal to 20% of the employee trips and would occur randomly over a 10-hour work day.

- 884 daily employee trips x 0.20 = 177 ancillary trips daily trips

- 177 ancillary trips daily trips / 10-hour day = 18 trips during the AM peak hour and 18 during the PM peak hour.

AM Peak Hour: 9 inbound and 9 outbound ancillary trips

PM Peak Hour: 9 inbound and 9 outbound ancillary trips

Table 4-1
Project Construction Traffic Generation Forecast

Type of Trips	Daily	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Employee Trips*	884	400	400	0	400	0	400
Truck Trips	103	11	6	5	11	6	5
Ancillary Trips	177	18	9	9	18	9	9
NET Project Trips (PCEs)	**1,164**	**429**	**415**	**14**	**429**	**15**	**414**

Note: PM Peak Hour does not coincide with the departure time of employees but to be conservative was assumed in the analysis

PCE: Passenger Car Equivalent

The project will generate a total of 1,164 trips daily, including 429 trips during the AM peak hour and 429 trips during the PM peak hour.

Project Trip Distribution

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by project traffic. The potential interaction between the proposed land use and surrounding regional access routes are considered to identify the route where the project traffic will distribute.

The workforce vehicle trips associated with construction were calculated based upon these assumptions. It is anticipated that most workers would be drawn from the Blythe/Palo Verde Valley region and the Desert Center region, with a smaller portion drawn from the Imperial Valley or Eastern Riverside County region. Construction of the project will require the use and installation of heavy equipment and associated systems. Heavy equipment will be delivered via truck, using Neighbours Boulevard from I-10 to the north and south utilizing Riverside Drive and Seeley Avenue. The anticipated trip distribution for the proposed development is presented in the attached figures. These figures indicate the proportion of project traffic which will use the street segments and turning movements indicated.

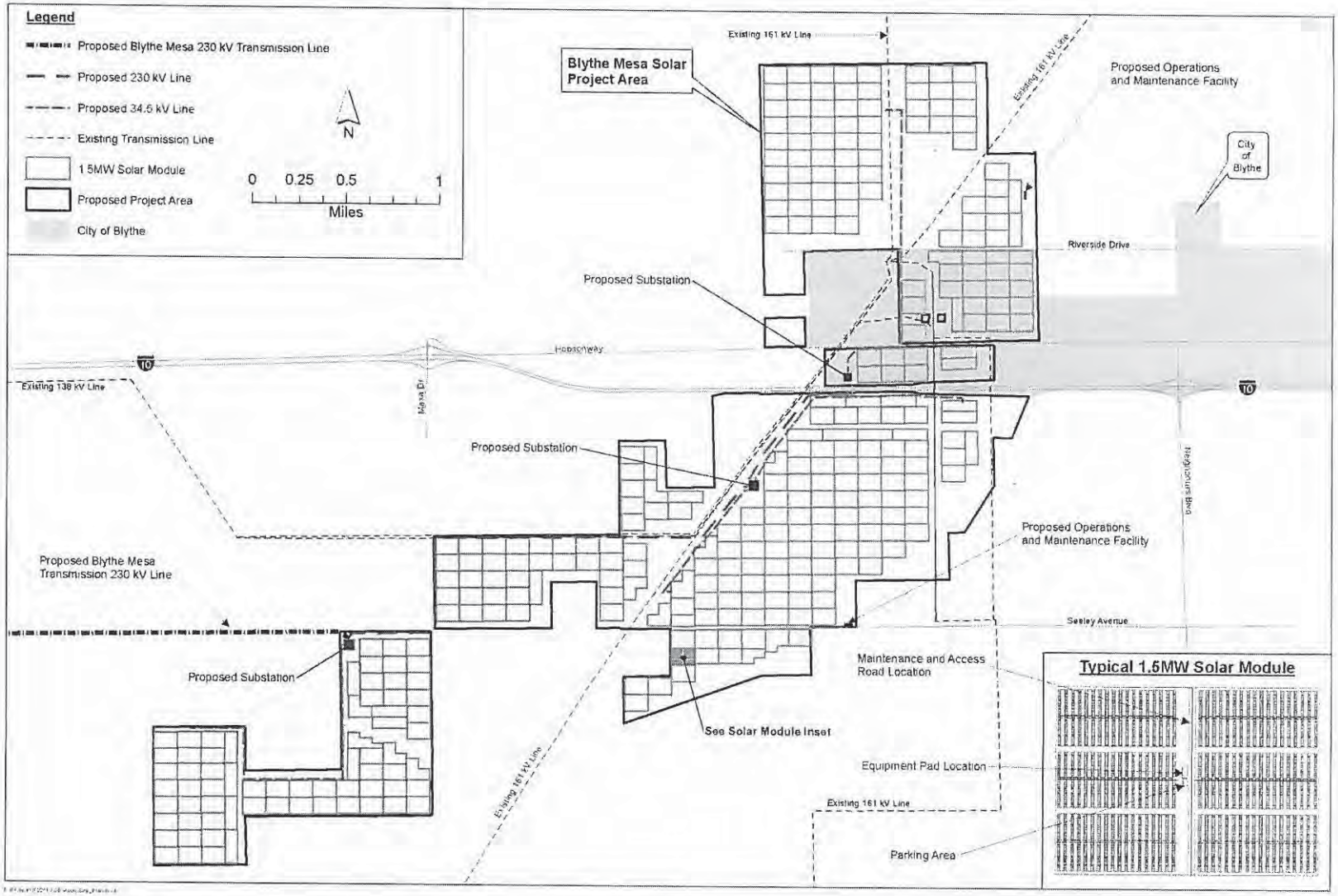
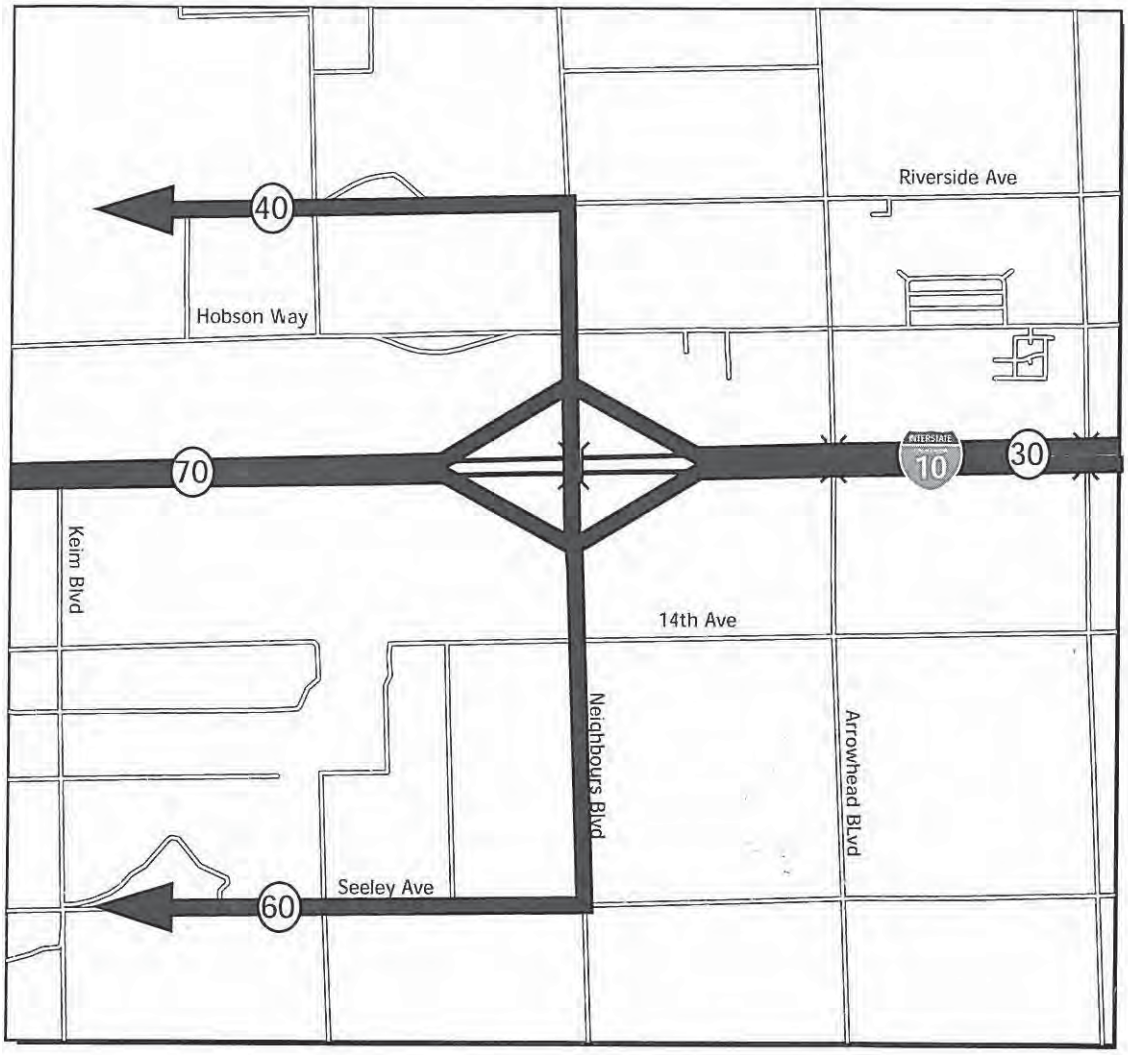


Figure 4-1
Project Site

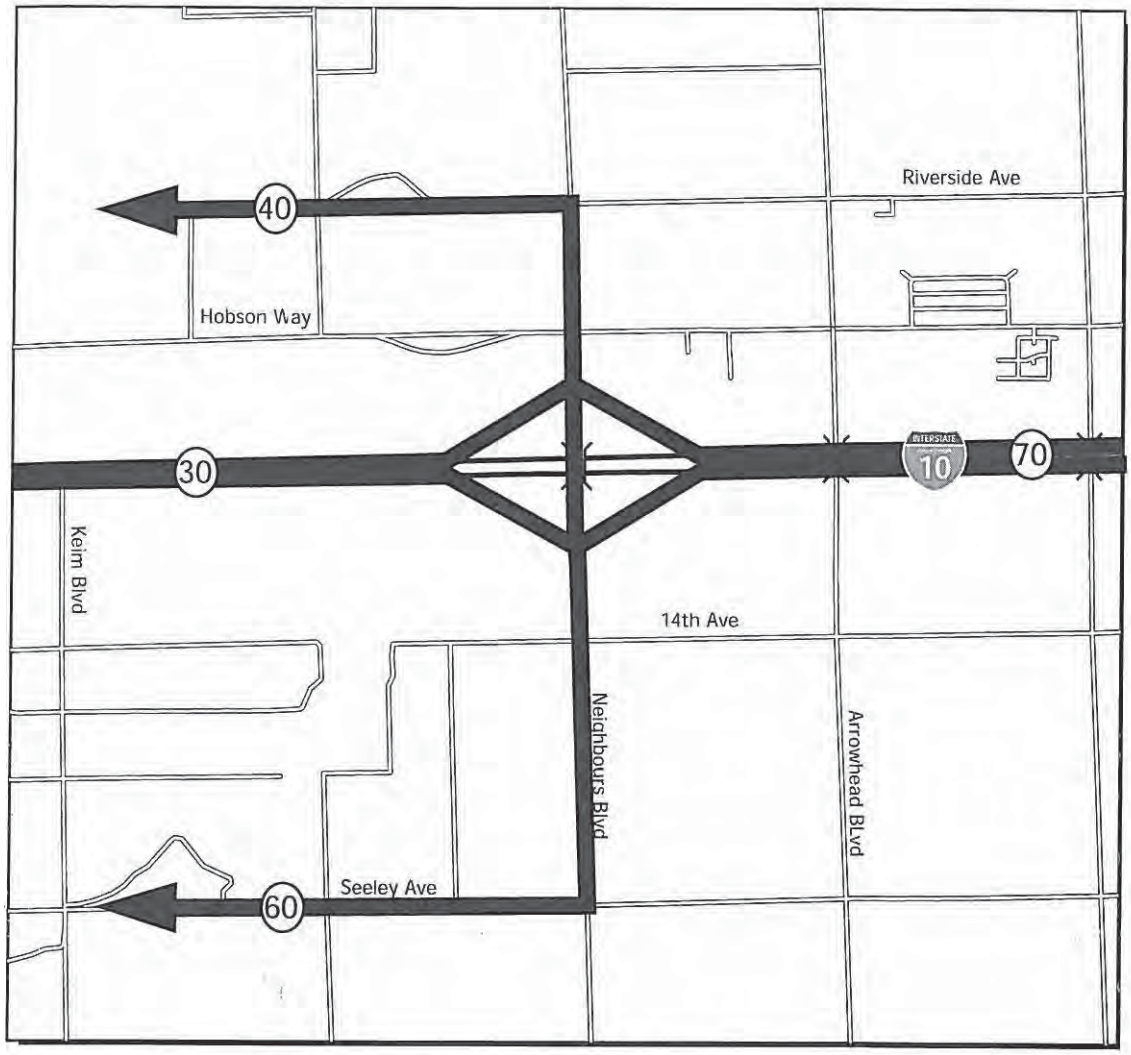


LEGEND

60 Truck Trip Distribution

Figure 4.2A
Truck Project Trip Distribution

N
Not To Scale

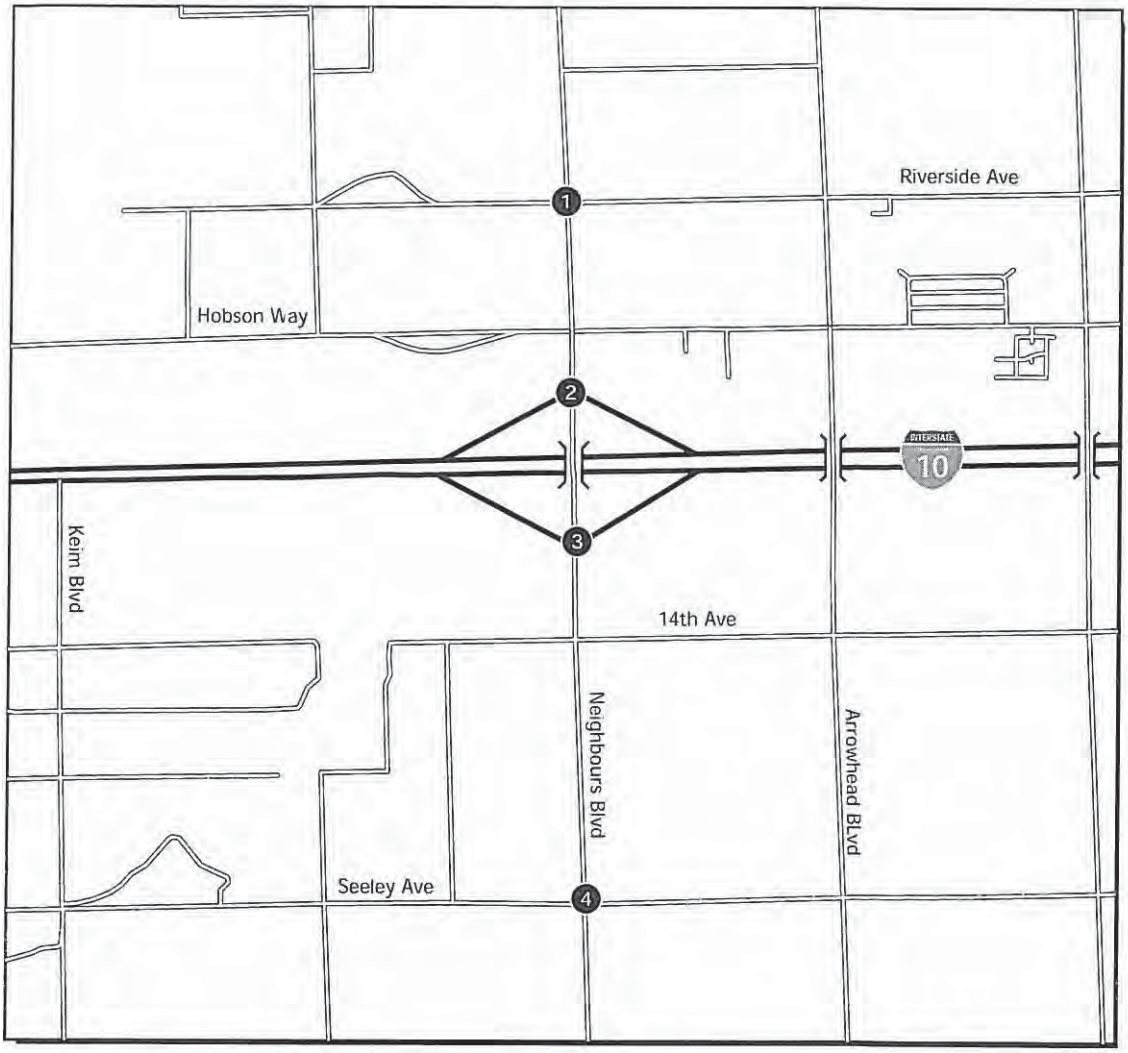


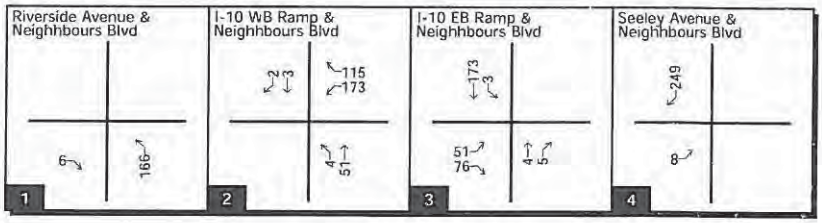
LEGEND

60 Employee Trip Distribution

Figure 4.2B
Employee Project Trip Distribution

N
Not To Scale

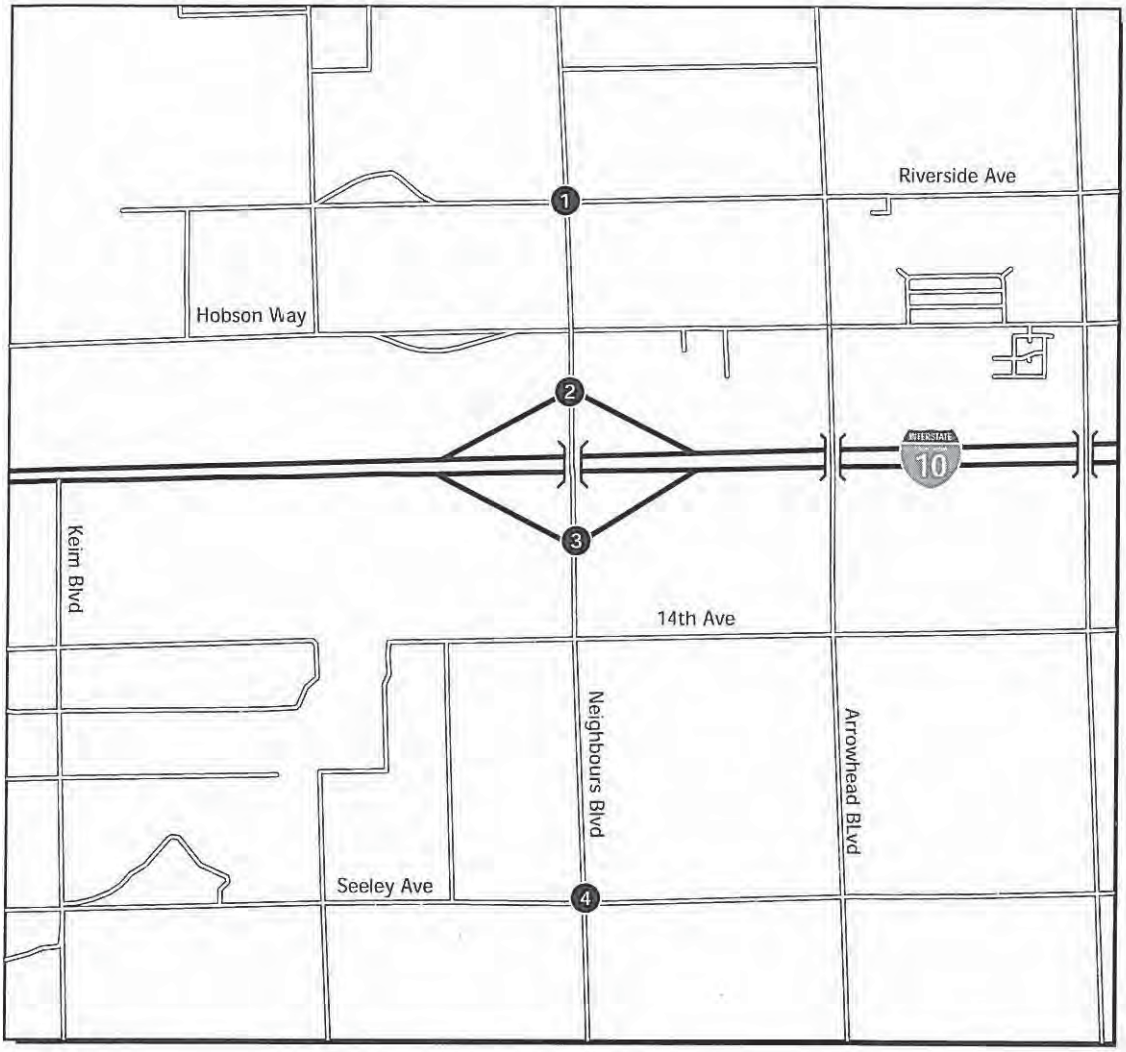


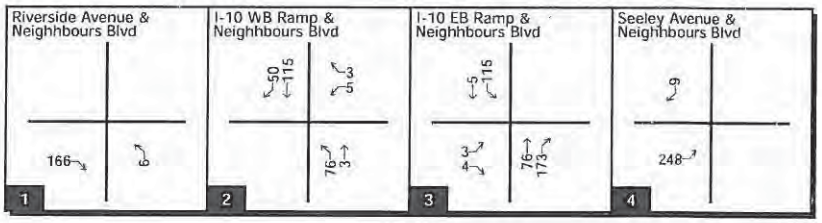


LEGEND	
10	AM Peak Hour Trips

Figure 4.3
Project Related Construction Traffic Volumes - AM Peak Hour

N
Not To Scale





LEGEND

10 PM Peak Hour Trips

Figure 4.4
Project Related Construction Traffic Volumes - PM Peak Hour

N
Not To Scale

PROJECT NAME/APPLICANT	LOCATION	STATUS	Years of Construction	Number of Workers	PROJECT DESCRIPTION
Solar					
Blythe Airport Solar I Project/ • U.S. Solar • EA # 42340	Northeast of Blythe Municipal Airport	Approved			100 MW pholovoltaic power plan on 640 acres in five- 20 MW phases that includes a 3,200 ft long 33 kV generation tie
Blythe Solar Power Project/ • Solar Millennium • CACA 48811	8 miles west of the City of Blythe	CEC Approved September 2010; BLM Approved October 2010; Temporary Suspension Issued 8/23/11	Approximately 69 months	1,044 during peak construction 221 permanent, full-time jobs during operation	Concentrated solar thermal electric generating facility, using solar parabolic trough technology, with four adjacent and independent units of 250 MW nominal capacity each for a total nominal capacity of 1,000 MW. Project includes a double circuit 230 kV generation-tie line to interconnect with SCE's Colorado River substation as well as a 9.8 mile long natural gas pipeline connecting the project to the existing Southern California Gas (SCG) pipeline. Project would disturb 5,950 acres and occupy 7,025 acres.
Blythe Energy Project II	Blythe, CA. Near Blythe Airport and I-10	Approved by BLM in 2006; Notice of decision regarding petition to extend the deadline for commencement of construction-2011; Petition to Amend presented April 2012	N/A	N/A	520 MW combined-cycle power plant located entirely within the Blythe Energy Project site boundary Blythe Energy Project II will interconnect with the Buck Substatio constructed by WAPA as part of the Blythe Energy Project. Project is designed on 20 acres of a 76-acre site.
Blythe Mesa II Solar Project	5 miles northwest of City of Blythe	Planned	Approximately 3 years	-300-500 daily during construction -12 permanent, full-time jobs during operation	437 MW PV solar plant that includes a 14-mile long transmission line to the Colorado River Substation. The project would occupy approximately 3,237 acres total.
McCoy Solar Energy Project • McCoy Solar, LLC • CACA 48728	13 miles northwest of Blythe	Planned NOI published 8/29/11	N/A	N/A	Up to a 750 MW PV solar power plant using photovoltaic technology. MW, solar thermal, 7,700 acres disturbed. Approximately 16 mile long 230 kV generation-tie and switchyard that will connect to SCE's Colorado River Substation. Peak workforce of approximately 750 people with up to 20 permanent workers.
Rio Mesa Solar Electric Generating Facility • BrightSource Energy, Inc • 2011-AFC-04 • CACA 53138	13 miles southwest of Blythe	Planned	N/A	N/A	Consists of three 250 MW solar concentration thermal power plants (750 MW total). Each plant requires about 1,850 acres (or 2.9 square miles) of land to operate. A 119 acre common area will include a combined administration, control, and maintenance facilities. The total area, including shared facilities, is approximately 5,750 acres.
Desert Quartzite/ • First Solar Development, Inc • CACA 49397	8 miles southwest of Blythe	Planned POD Submitted	N/A	N/A	600 MW, Photovoltaic, 7,245 acres disturbed, no transmission line
Mc Coy Soleil Project (different from the McCoy Solar Project CACA 48728) • enXco, Inc • CACA 49490		Pending			300 MW PV solar plant, 20,484. POD submitted
Colorado River Substation Expansion	10 miles southwest of Blythe	Approved July 2011	N/A	N/A	Proposed to be expanded as a 500/230 kV substation and would be constructed in an area approximately 1,000 feet by 1,900 feet, permanently disturbing approximately 90 acres. The 500 kV switching station would include buses, circuit brakers, and disconnect switches. The switchyard would be equipped with 108-foot-high dead-end structures. Outdoor night lighting would be designed to illuminate the switchrack when manuall switched on.
Blythe Solar Power Generation Station 1, LLC	Blythe, CA	Approved. Estimated online date June 2013	N/A	N/A	A planned 4.76 MW solar PV facility, on 29.4 acres, consisting of 69 PV panels that stand approximately 50-feet tall an d 72-feet wide, a 200 square fool equipment building, and a twenty-foot perimeter fire access road.
CACA 51967 –Brightsource Energy	12 miles west of Blythe	Case sent to California Desert District August 2011	N/A	N/A	Solar energy facility to occupy a total of 12,269 acres.
Blythe Cumulative					
PM33797		Approved	N/A	N/A	SCHED H DIVISION OF 2.14 AC INTO 2 SFR PARCELS.
PM34400		Approved	N/A	N/A	DIVIDE 80 AC INTO 2 SFR LOTS - SCHUDLE "H"
PM34759		Approved	N/A	N/A	DIVIDE 5.74 AC INTO 4 SFR LOTS - SCH "H"
PP23885		Approved	N/A	N/A	CHURCH W/ACCESSORY OUTDOOR RECREATION/AMPHITHEATER 8,890 SF CHURCH

McCoy Soleil Project
McCoy Solar Energy Project
Blythe Solar Power Project
Blythe Mesa II
Blythe Airport Solar
PM34400
PM33797
PM36025&PP23885
Blythe Energy Project II
Blythe, CA
Christopher Columbus Transcontinental Hwy
Blythe Mesa I
Substatio Expansion
Bright Source Energy
Desert Quartzite
78
S Neighbours Blvd
Rio Mesa Solar

APPENDIX F
STAGGERED TRIP SCENARIOS

With Project
0% Staggered

Scenario Report

Scenario:	Ex Plus Am Plus CP AM
Command:	Existing Plus Am+ CP AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
0% Staggered

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	E	40.1	0.318	+31.071
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	D	26.2	0.845	+17.203
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	B	14.6	0.426	+ 5.384
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	B	10.6	0.042	+ 1.066

With Project
0% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 9.9 Worst Case Level Of Service: E[40.1]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0	0	0	1 0 0 0	0	0	0 1	0	0	1! 0	0
Volume Module:												
Base Vol:		2			0			6			4	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		2			1			5			4	
Added Vol:		0			0			6			0	
PasserByVol:	601	0	3	1	1	0	0	9	5		0	0
Initial Fut:		2	4	0	0	0	0	15	5		4	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:		4			2			26			7	
Reduct Vol:	520	0	12	0	2	0	0	9	18		0	2
FinalVolume:		4			2			26			7	
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	16	xxxx	xxxxx	xxxx	1062	2	1073	1056	
Potent Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	225	1088	200	227	1078
Move Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	124	1088	120	125	1078
Volume/Cap:	0.32	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.07	0.02	0.15	0.06	0.00
Level Of Service Module:												
2Way95thQ:	1.4	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.2	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*		A	*	*	*	*	*		*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	A	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	362	xxxx	129	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.3	xxxxx	0.7	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	16.0	xxxxx	40.1	xxxxx
Shared LOS:		*		A	*	*	*	*	C		E	
ApproachDel:	*	xxxxxx	*	xxxxx			16.0		*	40.1	*	
ApproachLOS:		*			*		C			E		

Note: Queue reported is the number of cars per lane.

With Project
0% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 17.3 Worst Case Level Of Service: D[26.2]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1 0 0	0	0	0 1 0 1	0	0	0 0	0	0	1 0 0	1
Volume Module:												
Base Vol:		52			45			0			0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		56			49			0			0	
Added Vol:		181			10			0			0	
PasserByVol:	5	0	0	0	18			0	0		0	0
Initial Fut:	4	237	0	0	59	0	0	0	0		0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:		304			75			0			0	
Reduct Vol:	12	0		0	60		0	0		235	0	
FinalVolume:		304			75			0			0	
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	60	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	426	388	
Potent Cap.:	1556	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	589	550	304
Move Cap.:	1556	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	586	545	741
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.40	0.00	0.84
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	30.3
LOS by Move:		*		*	*	*	*	*	*		*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	A	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	586	xxxx	D xxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.9	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.2	xxxx	xxxxx
Shared LOS:		*		*	*	*	*	*	*		*	
ApproachDel:	A	xxxxxx	*	xxxxx			xxxxx			C	26.2	*
ApproachLOS:		*			*			*			D	

Note: Queue reported is the number of cars per lane.

With Project
0% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 6.4 Worst Case Level Of Service: B[14.6]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1 0			0 1			0 0 0			1 0		
Volume Module:												
Base Vol:	55			12			0			6		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			13			0			6		
Added Vol:	6	44	15	55	175	0	179	0	0	76	0	0
PasserByVol:	0	0				0		0	0		0	0
Initial Fut:	65	5	0	28	0	0	185	0	0	80	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:	82			35			232			101		
Reduct Vol:	0	62		0	288	0	0	0	0	0	0	0
FinalVolume:	82			35	0		232	0	0	101	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	82	xxxx	xxxxx	471	440	288	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1528	xxxx	xxxxx	555	514	756	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1528	xxxx	xxxxx	545	502	756	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.43	0.00	0.13	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	10.5	xxxxx	xxxx	xxxxx
LOS by Move:	*			A	*	*	*	*	B	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	545	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	16.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*			A	*	*	C	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			14.6			xxxxxx		
ApproachLOS:	*			*			B			*		

Note: Queue reported is the number of cars per lane.

With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[10.6]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0			0 0 1! 0			0 1! 0 0			0 1! 0 0		
Volume Module:												
Base Vol:	55			4			1	1		2		
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:	59			4			1	1		2		
Added Vol:	1	17		1	52	249	8	0	0	0	23	0
PasserByVol:	0			0								
Initial Fut:	60	0	0	5	2	0	0	0	0	2	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:	72			6			297	11		3		
Reduct Vol:	0	21		0	64	0	0	0	0	3	27	0
FinalVolume:	72			6	0		297	11	0	3	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	361	xxxx	xxxxx	92	xxxx	xxxxx	315	320	212	311	458	82
Potent Cap.:	1209	xxxx	xxxxx	1515	xxxx	xxxxx	641	600	833	646	502	983
Move Cap.:	1209	xxxx	xxxxx	1515	xxxx	xxxxx	630	597	833	641	500	983
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.02	0.00	0.00	0.04	0.01	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.0	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*			A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	661	xxxxx	xxxx	683	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	xxxxx	10.6	xxxxx
Shared LOS:	*			*	*	*	*	B	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			10.6			10.6		
ApproachLOS:	*			*			B			B		

Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Ex Plus Am Plus CP PM
Command:	Existing Plus Am+ CP PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	B	13.2	0.413	+ 4.617 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	C	20.0	0.259	+10.432 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	F	126.5	0.873	+116.882 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	B	13.1	0.386	+ 3.184 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 10.1 Worst Case Level Of Service: B[13.2]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 1 0 0 0		0 0 1 0 0		0 1! 0 0 0	
Volume Module:								
Base Vol:	5		0	0	0	2	0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	5		0	0	0	2	0	
Added Vol:	0		0	0	1	301	0	
PasserByVol:	1	0	2	1	4	0	0	0	3	0	1
Initial Fut:	9	0	6	0	0	0	0	0	303	0	5	0	1
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.68 0.68	0.68	0.68 0.68	0.68	0.68 0.68	0.68	0.68 0.68	0.68
PHF Volume:	8		1	0	0	446	0	
Reduct Vol:	15	0	12	0	6	0	0	2	0	12	0	3
FinalVolume:	0	8	0	1	0	0	0	446	0	0	0	3
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:								
Cnflict Vol:	6 xxxx xxxxx		20 xxxx xxxxx	xxxx	59	6	277	53	
Potent Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	836	1082	679	842	1072
Move Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	827	1082	395	834	1072
Volume/Cap:	0.01 xxxx xxxx		0.00 xxxx xxxx	xxxx	0.00	0.41	0.03	0.00	0.00
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2 xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*		A	*	*	*	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx	1081	xxxx	453	xxxxx
SharedQueue:	xxxxx xxxx xxxxx		0.0 xxxx xxxxx	xxxxx	xxxx	2.1	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx	10.7	xxxxx	13.2	xxxxx
Shared LOS:	*		A	*	*	B	*	B	*
ApproachDel:	xxxxxx		xxxxxx		10.7		13.2		
ApproachLOS:	*		*		B		B		

Note: Queue reported is the number of cars per lane.

With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C[20.0]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	75		0	10	0	0	0	
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08	1.08 1.08	1.08
Initial Bse:	81		0	11	0	0	0	
Added Vol:	14		0	49	178	0	0	0	45	0	11
PasserByVol:	76	0	0	0	479	0	0	0	0	0	16
Initial Fut:	95	0	0	0	189	0	0	0	5	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.84 0.84	0.84	0.84 0.84	0.84	0.84 0.84	0.84	0.84 0.84	0.84
PHF Volume:	113		0	630	225	0	0	0	60	0	32
Reduct Vol:	98	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	113	0	0	630	225	0	0	0	0	32
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:								
Cnflict Vol:	630 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	1052	940	113
Potent Cap.:	962 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	253	237	945
Move Cap.:	962 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	232	237	945
Volume/Cap:	0.10 xxxx xxxx		xxxx xxxx	xxxx	xxxx	xxxx	xxxx	0.26	0.00	0.03
Level Of Service Module:								
2Way95thQ:	0.3 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx	xxxxx	xxxx	xxxx	0.1
Control Del:	9.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxx	8.9
LOS by Move:	*		*	*	*	*	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx	232	xxxx	xxxxx
SharedQueue:	0.3 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx
Shrd ConDel:	9.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.9	xxxx	xxxxx
Shared LOS:	*		*	*	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		20.0		
ApproachLOS:	A		*		*		D		*

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 14.0 Worst Case Level Of Service: F[126.5]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 0 0	0	1	0 0 1	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	35		12	0		43	13		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	38		13	0		46	14		0			
Added Vol:	79	58	476	79	0	11	0	4	0	0	0	0
PasserByVol:	0	0	173	0		0	0	0	0	0	0	0
Initial Fut:	0	117	231	0	7	0	57	0	18	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.87 0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87
PHF Volume:	135		564	0		66	21		0			
Reduct Vol:	0	267	0	99	0	0	0	0	0	0	0	0
FinalVolume:	135	0	564	0	0	66	21	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx		4.1 xxxx xxxxx		6.4	6.5	6.2 xxxxx xxxx xxxxx					
FollowUpTim:	xxxxx xxxx xxxxx		2.2 xxxx xxxxx		3.5	4.0	3.3 xxxxx xxxx xxxxx					
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx		135 xxxx xxxxx		1495	1362	99 xxxx xxxx xxxxx					
Potent Cap.:	xxxx xxxx xxxxx		1462 xxxx xxxxx		137	149	962 xxxx xxxx xxxxx					
Move Cap.:	xxxx xxxx xxxxx		1462 xxxx xxxxx		76	65	962 xxxx xxxx xxxxx					
Volume/Cap:	xxxx xxxx xxxx		0.39 xxxx xxxx		0.87	0.00	0.02 xxxx xxxx xxxx					
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx		1.9 xxxx xxxxx		xxxx xxxx		0.1 xxxx xxxx xxxxx					
Control Del:	xxxxx xxxx xxxxx		9.0 xxxx xxxxx		xxxxx xxxx		8.8 xxxxx xxxx xxxxx					
LOS by Move:	*		A	*	*		A	*	*			
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		76	xxxx xxxxx	xxxx xxxx xxxxx					
SharedQueue:	xxxxx xxxx xxxxx		1.9 xxxx xxxxx		4.4	xxxx xxxxx	xxxxx xxxx xxxxx					
Shrd ConDel:	xxxxx xxxx xxxxx		9.0 xxxx xxxxx		163.5	xxxx xxxxx	xxxxx xxxx xxxxx					
Shared LOS:	*		A	*	*		F	*	*			
ApproachDel:	xxxxxx		xxxxx		126.5		xxxxxx					
ApproachLOS:	*		*		F		*					

Note: Queue reported is the number of cars per lane.

With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 7.3 Worst Case Level Of Service: B[13.1]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 0	0	0	0 1! 0	0	
Volume Module:												
Base Vol:	86		2	1	1	0			0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	93		2	1	1	0			0			
Added Vol:	2	90	248	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	9	0		0	0	0	0	0	0	0
Initial Fut:	95	0	259	0	0	0	0	0	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.89 0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89
PHF Volume:	106		279	0		11	0		0			
Reduct Vol:	0	103	0	0	0	0	0	0	0	0	0	0
FinalVolume:	106	0	279	0	0	11	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx		7.1	xxxx xxxxx			6.5			
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx		3.5	xxxx xxxxx			4.0			
Capacity Module:												
Cnflict Vol:	114 xxxx xxxxx		114 xxxx xxxxx		230	xxxx xxxxx			234			
Potent Cap.:	1488 xxxx xxxxx		1488 xxxx xxxxx		729	xxxx xxxxx			670			
Move Cap.:	1488 xxxx xxxxx		1488 xxxx xxxxx		724	xxxx xxxxx			668			
Volume/Cap:	0.00 xxxx xxxx		0.00 xxxx xxxx		0.39	xxxx xxxx			0.01			
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx		1.8	xxxx xxxxx			xxxx xxxx xxxxx			
Control Del:	7.4 xxxx xxxxx		7.4 xxxx xxxxx		13.1	xxxx xxxxx			xxxxx xxxx xxxxx			
LOS by Move:	*		A	*	B	*			*			
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT							
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx				xxxx 796 xxxxx			
SharedQueue:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx				0.1 xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx				9.6 xxxxx			
Shared LOS:	*		*	*	*	*			A			
ApproachDel:	xxxxxx		xxxxx		13.1				9.6			
ApproachLOS:	*		*		B				A			

Note: Queue reported is the number of cars per lane.

With Project
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Scenario Report

Scenario:	Ex Plus Am Plus CP AM
Command:	Existing Plus Am+ CP AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	C	22.9	0.241	+13.805
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	C	15.1	0.595	+ 6.075
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	B	12.5	0.298	+ 3.257
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	B	10.3	0.040	+ 0.778

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: C[22.9]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0	0	0	1 0 0 0	0	0	0 1 0	0	0	1! 0	0
Volume Module:												
Base Vol:		2			0			0			4	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		2			1			6			4	
Added Vol:		0			0		0	5			0	
PasserByVol:	826	0	3	1	1	0	0	0	7	5	0	0
Initial Fut:		2	4	0	0	0		0	13	5	4	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:		4			2			23			7	
Reduct Vol:	393	0	12	0	2	0	0	9	18	0	7	2
FinalVolume:		4			2		0	23			7	
	393		12	2		0			18			2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	16	xxxx	xxxxx	xxxx	808	2	818	802	10
Potent Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	317	1088	297	320	1078
Move Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	219	1088	215	221	1078
Volume/Cap:	0.24	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.04	0.02	0.08	0.03	0.00
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.9	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*		A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	A xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	510	xxxx	228	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.2	xxxxx	0.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	12.5	xxxxx	22.9	xxxxx
Shared LOS:		*		A	*	*	*	*	B	*	C	*
ApproachDel:	*	xxxxxx	*		xxxxx			12.5		*	22.9	*
ApproachLOS:		*			*			B			C	

Note: Queue reported is the number of cars per lane.

With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: C[15.1]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1 0 0	0	0	0 1 0 1	0	0	0 0	0	0	1 0 0	1
Volume Module:												
Base Vol:		52			0			45			0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		56			0			49			0	
Added Vol:		137			0			0			0	
PasserByVol:	5	0	0	0	29	0	0	0	0	0	11	0
Initial Fut:	3	193	0	0	14	0	0	8	0	0	130	0
User Adj:	0	1.00	0	0	1.00	0	0	0	0	0	1.00	0
PHF Adj:	1.00	0.78	1.00	1.00	0.78	1.00	1.00	0.78	1.00	1.00	0.78	1.00
PHF Volume:	0.78	247	0.78	0.78	0.78	0.78	0.78	57	0.78	0.78	0.78	0.78
Reduct Vol:	0	0	0	0	55	0	0	0	0	0	0	0
FinalVolume:	11	247	0	0	0	0	0	72	0	0	180	0
	0		0	0		0			0			0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	55	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	360	324	247
Potent Cap.:	1563	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	643	593	796
Move Cap.:	1563	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	639	593	796
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.28	0.00	0.59
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	4.0
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.9
LOS by Move:		*		*	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	A xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	639	xxxx	C xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.2	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.8	xxxx	xxxxx
Shared LOS:		*		*	*	*	*	*	*	*	*	*
ApproachDel:	A	xxxxxx	*		xxxxx			xxxxx		B	15.1	*
ApproachLOS:		*			*			*			C	

Note: Queue reported is the number of cars per lane.

With Project
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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: B[12.5]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	R	
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0	1	0	0	1	0	0	0	1	0	0
Volume Module:												
Base Vol:			55			12			6			4
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			13			6			4
Added Vol:			5	44		12	55		135	0		57
PasserByVol:	0		0				132	0		0	0	
Initial Fut:	0		64	0		25	0	0	141	0	0	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:			81			31			177			77
Reduct Vol:			0	60		0	234	0	0	0	0	0
FinalVolume:	0		81	0		31	0	0	177	0	0	77
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	81	xxxx	xxxxx	407	377	234	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1530	xxxx	xxxxx	604	558	810	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1530	xxxx	xxxxx	594	546	810	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.30	0.00	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	9.9	xxxxx	xxxx	xxxxx
LOS by Move:		*			*			*			*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		594	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx		0.1	xxxxx	xxxxx		1.2	xxxx	xxxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx		7.4	xxxx	xxxxx		13.6	xxxx	xxxxx	xxxxx	xxxxx
Shared LOS:		*				*			B		*		
ApproachDel:	xxxxxx			xxxxxx				12.5			xxxxxx		
ApproachLOS:		*			*			B			*		

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[10.3]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	R	
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1!	0	0	1!	0	0	1!	0	0	1!
Volume Module:												
Base Vol:			55			4			1			2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			4			1			2
Added Vol:			1	17		52	187	1	7	0	0	0
PasserByVol:	1		0				1	0		0	23	
Initial Fut:	0		60	0		0	188	0	8	0	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:			72			6			223	10		3
Reduct Vol:			0	21		0	64		0	0	0	0
FinalVolume:	1		72	0		6	0	0	223	10	0	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	287	xxxx	xxxxx	92	xxxx	xxxxx	279	283	176	274	385	
Potent Cap.:	1286	xxxx	xxxxx	1515	xxxx	xxxxx	678	629	873	682	552	983
Move Cap.:	1286	xxxx	xxxxx	1515	xxxx	xxxxx	667	626	873	678	549	983
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.01	0.00	0.00	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.8	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*			A		*	*		*		
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	702	xxxxx	xxxx	718	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.2	xxxxx	xxxxx	10.3	xxxxx
Shared LOS:		*			*		*	B			B	
ApproachDel:	xxxxxx			xxxxxx				10.2			10.3	
ApproachLOS:		*			*			B			B	

Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Ex Plus Am Plus CP PM
Command:	Existing Plus Am+ CP PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	B	11.5	0.311	+ 2.886 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	C	15.5	0.184	+ 5.987 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	E	37.2	0.431	+27.584 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	B	12.0	0.291	+ 2.109 D/V

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 9.2 Worst Case Level Of Service: B[11.5]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 1 0 0 0		0 0 1 0 0		0 0 1! 0 0	
Volume Module:								
Base Vol:	5	0	0	0	2	0	0	0
Growth Adj:	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08
Initial Bse:	5	0	4	0	3	0	1	0
Added Vol:	0	0	0	0	2	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0
Initial Fut:	5	0	4	0	5	0	1	0
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68
PHF Volume:	8	0	6	0	8	0	1	0
Reduct Vol:	0	0	0	0	0	0	0	0
FinalVolume:	8	0	6	0	8	0	1	0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx	xxxxx	6.5 6.2	7.1 6.5	6.2	
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx	xxxxx	4.0 3.3	3.5 4.0	3.3	
Capacity Module:								
Cnflict Vol:	6 xxxx xxxxx		20 xxxx xxxxx	xxxx	53 6	216 47		
Potent Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	842 1082	745 848	1072	
Move Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	835 1082	745 841	1072	
Volume/Cap:	0.01 xxxx xxxx		0.00 xxxx xxxx	xxxx	0.00 0.31	0.02 0.00	0.00	
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx xxxx	xxxxx	
Control Del:	7.2 xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx xxxx	xxxxx	
LOS by Move:	*		A	*	*	*	*	
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx	1081	xxxx	570 xxxxx
SharedQueue:	xxxxx xxxx xxxxx		0.0 xxxx xxxxx	xxxxx	xxxx	1.3 xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx	9.8 xxxxx	11.5	xxxxx
Shared LOS:	*		A	*	*	A	B	
ApproachDel:	xxxxxx		xxxxxx		9.8		11.5	
ApproachLOS:	*		*		A		B	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[15.5]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	75	0	10	0	0	0	0	0
Growth Adj:	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08
Initial Bse:	81	0	11	0	0	0	0	0
Added Vol:	12	0	49	134	0	0	45	0 11
PasserByVol:	0	0	0	360	0	0	0	0 13
Initial Fut:	93	0	60	145	0	0	4	0 24
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84
PHF Volume:	111	0	73	173	0	0	59	0 28
Reduct Vol:	0	0	0	0	0	0	0	0 0
FinalVolume:	111	0	73	173	0	0	59	0 28
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx		6.5	
FollowUpTim:	2.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxx xxxxx	6.4	4.0	6.2
Capacity Module:						3.5		3.3
Cnflict Vol:	488 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx xxxxx		750	
Potent Cap.:	1086 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx xxxxx	836	342	111
Move Cap.:	1086 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx xxxxx	340	317	948
Volume/Cap:	0.07 xxxx xxxx		xxxx xxxx	xxxx	xxxx xxxx xxxx	321	0.18	948 0.03
Level Of Service Module:								
2Way95thQ:	0.2 xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx xxxxx	xxxx xxxx		
Control Del:	8.6 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx xxxx xxxxx	xxxxx xxxx		0.1
LOS by Move:	*		*	*	*	*	*	8.9
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx	xxxxx	xxxx xxxx xxxxx		321	xxxx xxxxx
SharedQueue:	0.2 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx xxxx xxxxx		0.7	xxxx xxxxx
Shrd ConDel:	8.6 xxxx xxxxx		xxxxx xxxx	xxxxx	xxxxx xxxx xxxxx		18.7	xxxx xxxxx
Shared LOS:	*		*	*	*	*	C	
ApproachDel:	xxxxxx		xxxxxx		xxxxxx		15.5	
ApproachLOS:	*		*		*		C	

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: E[37.2]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 0 0	0	1	0 1	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	35		12	0		43	13		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	38		13			46	14		0			
Added Vol:	60	58	358	79	0	10	0		0			
PasserByVol:	0	130	0		0	3	0		0	0		
Initial Fut:	98		371	0	6	0	0		0	0		
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.87 0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87
PHF Volume:	113		428			65	20		0			
Reduct Vol:	0	217	0	98		0	0		0			
FinalVolume:	113		428	0		65	20		0	0		
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx		4.1 xxxx xxxxx			6.4 6.5	6.2	xxxxx	xxxx xxxxx			
FollowUpTim:	xxxxx xxxx xxxxx		2.2 xxxx xxxxx			3.5 4.0	3.3	xxxxx	xxxx xxxxx			
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx		113 xxxx xxxxx			1175 1066	98	xxxx	xxxx xxxxx			
Potent Cap.:	xxxx xxxx xxxxx		1489 xxxx xxxxx			214 224	964	xxxx	xxxx xxxxx			
Move Cap.:	xxxx xxxx xxxxx		1489 xxxx xxxxx			151 140	964	xxxx	xxxx xxxxx			
Volume/Cap:	xxxx xxxx xxxx		0.29 xxxx xxxx			0.43 0.00	0.02	xxxx	xxxx xxxx			
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx		1.2 xxxx xxxxx			xxxx xxxx	0.1	xxxx	xxxx xxxxx			
Control Del:	xxxxx xxxx xxxxx		8.4 xxxx xxxxx			xxxxx xxxx	8.8	xxxxx	xxxx xxxxx			
LOS by Move:	*		A	*		*	A		*			
Movement:	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT		LT - LTR - RT				
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx			151	xxxx xxxxx		xxxx xxxx xxxxx			
SharedQueue:	xxxxx xxxx xxxxx		1.2 xxxx xxxxx			1.9	xxxx xxxxx		xxxxx xxxx xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx		8.4 xxxx xxxxx			45.8	xxxx xxxxx		xxxxx xxxx xxxxx			
Shared LOS:	*		A	*		E	*		*			
ApproachDel:	xxxxxx		xxxxx			37.2			xxxxxx			
ApproachLOS:	*		*			E			*			

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 5.9 Worst Case Level Of Service: B[12.0]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0	0	0	0 1! 0	0	
Volume Module:												
Base Vol:	86		2	1		1	0		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	93		2	1		1	0		0			
Added Vol:	2		2	1		1	0		0			
PasserByVol:	0	0	1	7		187	0		0	0		
Initial Fut:	95	0	5	8		188	0		0	0		
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.89 0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89
PHF Volume:	106		4	103	9	211	0		0			
Reduct Vol:	0		0		0	0	0		0			
FinalVolume:	106	7	4	103	9	211	0		0	0		
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx			7.1 xxxx	xxxxx			6.5		
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx			3.5 xxxx	xxxxx		7.1	4.0		6.2
Capacity Module:												
Cnflict Vol:	112 xxxx xxxxx		114 xxxx xxxxx			229 xxxx	xxxxx			231		
Potent Cap.:	1491 xxxx xxxxx		1488 xxxx xxxxx			730 xxxx	xxxxx		227	672		110
Move Cap.:	1491 xxxx xxxxx		1488 xxxx xxxxx			725 xxxx	xxxxx		733	670		949
Volume/Cap:	0.00 xxxx xxxx		0.00 xxxx xxxx			0.29 xxxx	xxxx		731	0.01	0.00	949 0.01
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx			1.2 xxxx	xxxxx		xxxx	xxxx xxxxx		
Control Del:	7.4 xxxx xxxxx		7.4 xxxx xxxxx			12.0 xxxx	xxxxx		xxxxx	xxxx xxxxx		
LOS by Move:	*		A	*		B	*		*			
Movement:	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx			xxxx	xxxx xxxxx		xxxx	797	xxxxx	
SharedQueue:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx	xxxx xxxxx		xxxxx	0.1	xxxxx	
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx	xxxx xxxxx		xxxxx	9.6	xxxxx	
Shared LOS:	*		*	*		*	*		*	A		
ApproachDel:	xxxxxx		xxxxx			12.0				9.6		
ApproachLOS:	*		*			B				A		

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Scenario Report

Scenario:	Ex Plus Am Plus CP AM
Command:	Existing Plus Am+ CP AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
30% Staggered

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	C	20.7	0.224	+11.675 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	B	14.1	0.547	+ 5.069 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	B	12.1	0.272	+ 2.891 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	B	10.2	0.039	+ 0.720 D/V

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.6 Worst Case Level Of Service: C[20.7]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1! 0	0	1	0 0 0	0	0	1 0	0	1! 0	0
Volume Module:												
Base Vol:			2		0			0	6		4	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			2		1			1	5		4	
Added Vol:			0		0	0	5	6			0	
PasserByVol:	10		0	3	1	1	0	0	6	5	0	0
Initial Fut:			2	0	1	0	0	0	12	0	4	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:			4		2			0	21		7	
Reduct Vol:			0	12	0	2	0	0	9	18	0	2
FinalVolume:			4	0	2	0	0	0	21	0	7	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	16	xxxx	xxxxx	xxxx	754	2	763	748	10
Potent Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	341	1088	324	344	1078
Move Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	245	1088	241	247	1078
Volume/Cap:	0.22	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.04	0.02	0.07	0.03	0.00
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.8	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:			*			A	*	*	*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	533	xxxx	255	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.2	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	12.2	xxxxx	20.7	xxxxx
Shared LOS:		*				A	*	*		B		C
ApproachDel:	*	xxxxxx	*		xxxxx			12.2	*		20.7	*
ApproachLOS:		*			*			B			C	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: B[14.1]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1	0 0	0	0	1 0 1	0	0	0 0	0	1	0 1
Volume Module:												
Base Vol:			52		0			45	0		0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			56		0			49			0	
Added Vol:			127		0			0	0		0	
PasserByVol:	5		0	0	0	29	13	8	0	0	11	0
Initial Fut:	3		0	0	0	13	0	0	0	0	0	12
User Adj:	0		183	0	0	0	0	57	0	0	0	0
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Reduct Vol:			235		0			72	0		0	
FinalVolume:	11		0	0	0	54	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	54	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	346	310	235
Potent Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	655	604	810
Move Cap.:	1564	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	651	604	810
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.26	0.00	0.55
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	3.4
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.7
LOS by Move:			*		*	*	*	*	*			*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	651	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	1.0	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.5	xxxx	xxxxx
Shared LOS:		*			*		*	*	*			*
ApproachDel:	A	xxxxxx	*		xxxxx			xxxxx			14.1	*
ApproachLOS:		*			*			*			B	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: B[12.1]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0	1	0	0	1	0	0	1	0	0	1
Volume Module:												
Base Vol:			55			12			6			0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			13			6			0
Added Vol:			5	44		11	55		125	0		53
PasserByVol:	0		0				123	0		0		0
Initial Fut:	0		64	3		24	0	0	131	0		57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:			81			30			165			72
Reduct Vol:			0	59		0	223	0		0		0
FinalVolume:	0		81	0		30	0	0	165	0		72
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	81	xxxx	xxxxx	393	363	223	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1530	xxxx	xxxxx	615	568	822	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1530	xxxx	xxxxx	606	556	822	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.27	0.00	0.09	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	9.8	xxxxx	xxxx	xxxxx
LOS by Move:			*			A	*	*	*			A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	606	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	1.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	13.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:			*			A	*		B	*		*
ApproachDel:		xxxxxx			xxxxx			12.1			xxxxxx	
ApproachLOS:		*			*			B			*	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[10.2]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1!	0	0	1!	0	0	1!	0	0	1!
Volume Module:												
Base Vol:			55			4			1			2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			4			1			2
Added Vol:			1	17		52	174	1		2	23	0
PasserByVol:	1		0			1			6	0		6
Initial Fut:	0		60	0		0	175	7	0	2	0	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:			72			6	208	8		3		3
Reduct Vol:			0	21		0	64	0	0	0	27	0
FinalVolume:	1		72	0		6	208	8	0	3	0	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	272	xxxx	xxxxx	92	xxxx	xxxxx	271	275	168	266	369	
Potent Cap.:	1303	xxxx	xxxxx	1515	xxxx	xxxxx	686	635	881	690	563	82
Move Cap.:	1303	xxxx	xxxxx	1515	xxxx	xxxxx	675	632	881	686	561	983
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.01	0.00	0.00	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.8	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:			*			A	*	*	*			B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	714	xxxxx	xxxx	726	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.1	xxxxx	xxxxx	10.2	xxxxx
Shared LOS:			*			*	*		*			B
ApproachDel:		xxxxxx			xxxxx			10.1			10.2	
ApproachLOS:		*			*			B			B	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Scenario Report

Scenario:	Ex Plus Am Plus CP PM
Command:	Existing Plus Am+ CP PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
30% Staggered

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	B	11.2	0.289	+ 2.573 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	B	14.9	0.169	+ 5.372 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	D	30.8	0.367	+21.181 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	B	11.8	0.271	+ 1.910 D/V

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 9.0 Worst Case Level Of Service: B[11.2]

Street Name:	Neighbours Blvd				Riverside Dr			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Include		Include		Include	
Lanes:	0 0 1! 0 0		0 1 0 0 0		0 0 1 0 0		0 1! 0 0 1	
Volume Module:								
Base Vol:	5	0	0	0	2	0	0	0
Growth Adj:	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08
Initial Bse:	5	0	4	0	2	3	0	1
Added Vol:	0	0	0	0	1	210	0	0
PasserByVol:	1 0	2	1 4	0	0	0	3	0 1
Initial Fut:	6 0	6	0 0	0	0	0	5	0 1
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68	0.68 0.68
PHF Volume:	8	8	6	0	3	312	7	1
Reduct Vol:	10 0	12	0 6	0	0 2	0	12	0 3
FinalVolume:	0 8	0	1 0	0	0 1	312	0	0 3
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx	xxxxx	6.5 6.2	7.1	6.5	6.2
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx	xxxxx	4.0 3.3	3.5	4.0	3.3
Capacity Module:								
Cnflict Vol:	6 xxxx xxxxx		20 xxxx xxxxx	xxxx	50 6	201	44	
Potent Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	845 1082	762	852	1072
Move Cap.:	1628 xxxx xxxxx		1609 xxxx xxxxx	xxxx	839 1082	538	845	1072
Volume/Cap:	0.01 xxxx xxxx		0.00 xxxx xxxx	xxxx	0.00 0.29	0.02	0.00	0.00
Level Of Service Module:								
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx	xxxx	xxxx xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2 xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*		A *	*	* *	*	*	*
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx 1081	xxxx	598	xxxxx
SharedQueue:	xxxxx xxxx xxxxx		0.0 xxxx xxxxx	xxxxx	xxxx 1.2	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx xxxx xxxxx		7.2 xxxx xxxxx	xxxxx	xxxx 9.7	xxxxx	11.2	xxxxx
Shared LOS:	*		A *	*	* A		B	
ApproachDel:	* xxxxxx	*	xxxxxx		9.7	*	11.2	*
ApproachLOS:	*		*		A		B	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[14.9]

Street Name:	Neighbours Blvd				I-10 WB Ramp			
Approach:	North Bound		South Bound		East Bound		West Bound	
Movement:	L - T - R		L - T - R		L - T - R		L - T - R	
Control:	Uncontrolled		Uncontrolled		Stop Sign		Stop Sign	
Rights:	Include		Channel		Include		Channel	
Lanes:	0 1 0 0 0		0 0 1 0 1		0 0 0 0 0		0 1 0 0 1	
Volume Module:								
Base Vol:	75	0	10	0	0	0	0	0
Growth Adj:	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08	1.08 1.08
Initial Bse:	81	0	11	0	0	0	0	0
Added Vol:	11	0	49	126	0	0	45	0 11
PasserByVol:	53 0	0	0 336	0	0	0	0	0 11
Initial Fut:	92 0	0	0	137	0	0	0	0 0
User Adj:	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00
PHF Adj:	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84	0.84 0.84
PHF Volume:	110	0	163	0	0	0	0	0
Reduct Vol:	71 0	0	0 459	0	0	0	58	0 26
FinalVolume:	110	0	0	163	0	0	0	0
Critical Gap Module:								
Critical Gp:	4.1 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx xxxxx		6.5	
FollowUpTim:	2.2 xxxx xxxxx	xxxxx	xxxx xxxxx	xxxxx	xxxx xxxxx	6.4	4.0	6.2
Capacity Module:						3.5		3.3
Cnflict Vol:	459 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		711	
Potent Cap.:	1113 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	792	361	110
Move Cap.:	1113 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	361	337	949
Volume/Cap:	0.06 xxxx xxxx		xxxx xxxx xxxx		xxxx xxxx xxxx	342	0.17	949 0.03
Level Of Service Module:								
2Way95thQ:	0.2 xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx	xxxx	xxxx	
Control Del:	8.5 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx	xxxxx	xxxx	0.1
LOS by Move:	*		* *	*	* *	*	*	8.9
Movement:	LT - LTR - RT		LT - LTR - RT		LT - LTR - RT		LT - LTR - RT	
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx		xxxx xxxx xxxxx		342	xxxx xxxxx
SharedQueue:	0.2 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		0.6	xxxx xxxxx
Shrd ConDel:	8.5 xxxx xxxxx		xxxxx xxxx xxxxx		xxxxx xxxx xxxxx		17.6	xxxx xxxxx
Shared LOS:	*		* *	*	* *	*	*	
ApproachDel:	xxxxxx	*	xxxxxx		xxxxxx		14.9	*
ApproachLOS:	A		*		*		C B	

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: D[30.8]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 0 0	0	1	0 0 1	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	35		12	0		43	13		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	38		13	0		46	14		0			
Added Vol:	56	58	334	79	0		0		0			
PasserByVol:	0	0	121	0	0	8	0	3	0	0	0	0
Initial Fut:	94	96	479	79	0	54	0	17	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.87 0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87
PHF Volume:	108		400	98		63	20		0			
Reduct Vol:	0		0	98		0	0		0			
FinalVolume:	108	107	400	0	0	63	20	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx		4.1 xxxx xxxxx			6.4 6.5	6.2	xxxxx	xxxx xxxxx			
FollowUpTim:	xxxxx xxxx xxxxx		2.2 xxxx xxxxx			3.5 4.0	3.3	xxxxx	xxxx xxxxx			
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx		108 xxxx xxxxx			1110 1006	98	xxxx	xxxx xxxxx			
Potent Cap.:	xxxx xxxx xxxxx		1495 xxxx xxxxx			234 243	964	xxxx	xxxx xxxxx			
Move Cap.:	xxxx xxxx xxxxx		1495 xxxx xxxxx			171 159	964	xxxx	xxxx xxxxx			
Volume/Cap:	xxxx xxxx xxxx		0.27 xxxx xxxx			0.37 0.00	0.02	xxxx	xxxx xxxx			
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx		1.1 xxxx xxxxx	xxxx xxxx		0.1	xxxx	xxxx	xxxxx			
Control Del:	xxxxx xxxx xxxxx		8.3 xxxx xxxxx	xxxxx xxxx		8.8	xxxxx	xxxx	xxxxx			
LOS by Move:	*		A	*	*	A	*		*			
Movement:	LT - LTR - RT		LT - LTR - RT	LT - LTR - RT		LT - LTR - RT	LT - LTR - RT					
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx	171	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx xxxx xxxxx		1.1 xxxx xxxxx	1.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx		8.3 xxxx xxxxx	37.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*		A	*		E	*		*			
ApproachDel:	xxxxxx		xxxxx	30.8			xxxxxx					
ApproachLOS:	*		*	D			*		*			

Note: Queue reported is the number of cars per lane.

With Project
30% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 5.6 Worst Case Level Of Service: B[11.8]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 0	0	0	0 0 1! 0	0	
Volume Module:												
Base Vol:	86		2	1		1	0		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	93		2	1		1	0		0			
Added Vol:	2		2	1		1	0		0			
PasserByVol:	0	0	1	6	90	174	0	0	8	0	3	
Initial Fut:	95	0	5	7	90	175	0	0	8	0	3	
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.89 0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89
PHF Volume:	106		4	8		196	0		0			
Reduct Vol:	0		0	0		0	0		0			
FinalVolume:	106	0	4	8	0	196	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx			7.1 xxxx	xxxxx			6.5		
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx			3.5 xxxx	xxxxx		7.1	4.0	6.2	
Capacity Module:												
Cnflict Vol:	111 xxxx xxxxx		114 xxxx xxxxx			229 xxxx	xxxxx			230		
Potent Cap.:	1492 xxxx xxxxx		1488 xxxx xxxxx			731 xxxx	xxxxx		226	673	110	
Move Cap.:	1492 xxxx xxxxx		1488 xxxx xxxxx			725 xxxx	xxxxx		733	671	949	
Volume/Cap:	0.00 xxxx xxxx		0.00 xxxx xxxx			0.27 xxxx	xxxx		732	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx			1.1 xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	7.4 xxxx xxxxx		7.4 xxxx xxxxx			11.8 xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*		A	*		B	*		*			
Movement:	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT						
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx			xxxx xxxx	xxxxx		xxxx	797	xxxxx	
SharedQueue:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx xxxx	xxxxx		xxxxx	0.1	xxxxx	
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx xxxx	xxxxx		xxxxx	9.6	xxxxx	
Shared LOS:	*		*	*		*	*		*			
ApproachDel:	xxxxxx		xxxxx			11.8				9.6		
ApproachLOS:	*		*			B				A		

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Scenario Report

Scenario:	Ex Plus Am Plus CP AM
Command:	Existing Plus Am+ CP AM
Volume:	Existing AM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	AMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
40% Staggered

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Riverside Dr & Neighbours Blvd	A	9.0	0.011	C	17.6	0.193	+ 8.517 D/V
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.0	0.016	B	12.6	0.458	+ 3.621 D/V
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.2	0.011	B	11.5	0.228	+ 2.312 D/V
# 4 Seeley Ave & Neighbours Blvd	A	9.5	0.033	B	10.1	0.038	+ 0.611 D/V

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.3 Worst Case Level Of Service: C[17.6]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0	0	0	1 0 0 0	0	0	0 1 0	0	0	1! 0	0
Volume Module:												
Base Vol:		2			0			6			4	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		2			1			5			4	
Added Vol:		0			0		0	6			0	
PasserByVol:	680	0	3	1	1	0	0	5	5	0	0	0
Initial Fut:		2	4	0	0	0	0	11	5	0	4	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
PHF Volume:		4			2		0	19			7	
Reduct Vol:	316	0	12	0	2	0	0	9	0	18	0	0
FinalVolume:		4			2		0	19			7	2
	316	0	12	2	0	0	0	0	0	0	0	0
					2							2
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2	xxxx	xxxxx	16	xxxx	xxxxx	xxxx	652	2	660	646	10
Potent Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	390	1088	379	393	1078
Move Cap.:	1634	xxxx	xxxxx	1615	xxxx	xxxxx	xxxx	298	1088	298	301	1078
Volume/Cap:	0.19	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.03	0.02	0.06	0.02	0.00
Level Of Service Module:												
2Way95thQ:	0.7	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*		A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	589	xxxx	313	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	0.2	xxxxx	0.3	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	11.4	xxxxx	17.6	xxxxx
Shared LOS:		*		A	*	*	*	*	B	*	C	*
ApproachDel:	*	xxxxxx	*	xxxxx			11.4		*	17.6		*
ApproachLOS:		*					B			C		

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 7.7 Worst Case Level Of Service: B[12.6]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1 0 0	0	0	0 1 0 1	0	0	0 0	0	0	1 0 0	1
Volume Module:												
Base Vol:		52			45		0		0		0	
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		56			49						0	
Added Vol:		110		0			0		0		0	12
PasserByVol:	5	0	0	0	29	7	0	0	0	11	0	286
Initial Fut:	2	166	0	0	12	0	0	0	0	104	0	298
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:		213			71		0		0		0	
Reduct Vol:		0		0	53	0	0	0	0	147	0	381
FinalVolume:	9	213	0	0	71	0	0	0	0	0	0	0
	0	0	0	0	53	0	0	0	0	147	0	381
			0									
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	53	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	320	284	213
Potent Cap.:	1566	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	678	624	832
Move Cap.:	1566	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	674	624	832
Volume/Cap:	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	0.00	0.46
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	2.4
Control Del:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.9
LOS by Move:		*		*	*	*	*	*	*	*	*	B
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	674	xxxx	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.8	xxxx	xxxxx
Shrd ConDel:	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.8	xxxx	xxxxx
Shared LOS:		*		*	*	*	*	*	*	B	*	*
ApproachDel:	A	xxxxxx	*	xxxxx			xxxxx			12.6		*
ApproachLOS:		*					*			B		

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 4.5 Worst Case Level Of Service: B[11.5]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0	0	1	0	0	1	0	0	1	0	0	0
Volume Module:												
Base Vol:			55			12			6			0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			13			6			0
Added Vol:			4	44		55	0	108	0	46		0
PasserByVol:	0		0			9	106	0			0	0
Initial Fut:	0		63	0		77	0	114	0	50	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
PHF Volume:			79			27			143			63
Reduct Vol:			0	59		0	202	0			0	0
FinalVolume:	0		79	0		27	0	143	0	63	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	79	xxxx	xxxxx	366	336	202	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1532	xxxx	xxxxx	638	588	844	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1532	xxxx	xxxxx	629	577	844	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	0.23	0.00	0.07	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	9.6	xxxxx	xxxx	xxxxx
LOS by Move:			*			A	*	*	*	A		*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	629	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	12.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:			*			A	*		B	*		*
ApproachDel:		xxxxxx			xxxxx			11.5			xxxxxx	
ApproachLOS:			*			*			B			*

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.1]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	-	T	-	-	R	L	-	T	-	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1!	0	0	1!	0	0	1!	0	0	1!
Volume Module:												
Base Vol:			55			4			1			2
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:			59			4			1			2
Added Vol:			1	17		52	149	1	0	2	23	0
PasserByVol:	1		0			1		5	0	0		0
Initial Fut:	0		60	0		56	0	150	1	2	0	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:			72			6	178		1	3		3
Reduct Vol:			0	21		0	64	0		0	27	0
FinalVolume:	1		72	0		6	0	178	0	3	0	3
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	242	xxxx	xxxxx	92	xxxx	xxxxx	256	261	153	252	339	
Potent Cap.:	1336	xxxx	xxxxx	1515	xxxx	xxxxx	701	648	898	706	585	982
Move Cap.:	1336	xxxx	xxxxx	1515	xxxx	xxxxx	690	644	898	701	582	982
Volume/Cap:	0.00	xxxx	xxxx	0.00	xxxx	xxxx	0.01	0.00	0.00	0.04	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.7	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:			*			A	*	*	*	*		*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	735	xxxxx	xxxx	740	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.0	xxxxx	xxxxx	0.2	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.0	xxxxx	xxxxx	10.1	xxxxx
Shared LOS:			*			*	*		*			B
ApproachDel:		xxxxxx			xxxxx			10.0			10.1	
ApproachLOS:			*			*			A			B

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Scenario Report

Scenario:	Ex Plus Am Plus CP PM
Command:	Existing Plus Am+ CP PM
Volume:	Existing PM
Geometry:	Existing
Impact Fee:	Default Impact Fee
Trip Generation:	
Trip Distribution:	PMALL
Paths:	Default Path
Routes:	Default Route
Configuration:	Default Configuration

With Project
40% Staggered

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 1 Riverside Dr & Neighbours Blvd	A	8.6	0.005	B	10.7	0.248	+ 2.069
# 2 I-10 WB Ramp & Neighbours Blvd	A	9.5	0.066	B	13.8	0.148	+ 4.213
# 3 I-10 EB Ramp & Neighbours Blvd	A	9.6	0.068	C	23.4	0.287	+13.760
# 4 Seeley Ave & Neighbours Blvd	A	9.9	0.011	B	11.4	0.232	+ 1.565

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Riverside Dr & Neighbours Blvd

Average Delay (sec/veh): 8.7 Worst Case Level Of Service: B[10.7]

Street Name:	Neighbours Blvd						Riverside Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 1! 0	0	0	1 0 0 0	0	0	0 1 0	0	0	1! 0	0
Volume Module:												
Base Vol:		5			0		0	0		2		0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		5			0		0	0		2		0
Added Vol:		0			0		0	0		180		0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	5	0	0	0	0	0	0	0	182	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
PHF Volume:		8			0		0	0		268		0
Reduct Vol:		0	0		0	0		0	0	0	0	0
FinalVolume:	0	8	0	0	0	0	0	0	0	268	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	6.5	6.2	7.1	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	6	xxxx	xxxxx	20	xxxx	xxxxx	xxxx	47	6	176	41	
Potent Cap.:	1628	xxxx	xxxxx	1609	xxxx	xxxxx	xxxx	848	1082	791	855	1072
Move Cap.:	1628	xxxx	xxxxx	1609	xxxx	xxxxx	xxxx	843	1082	791	849	1072
Volume/Cap:	0.01	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	0.00	0.25	0.34	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	7.2	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:		*		A	*		*	*		*	*	
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1080	xxxx	650	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	1.0	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.2	xxxx	xxxxx	xxxxx	xxxx	9.4	xxxxx	10.7	xxxxx
Shared LOS:		*			*			*			B	
ApproachDel:		xxxxxx			xxxxx			9.4			10.7	
ApproachLOS:		*			*			A			B	

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 I-10 WB Ramp & Neighbours Blvd

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: B[13.8]

Street Name:	Neighbours Blvd						I-10 WB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Channel			Include			Channel		
Lanes:	0	1 0 0	0	0	0 1 0 1	0	0	0 0	0	0	1 0 0	1
Volume Module:												
Base Vol:		75			0		10	0		0		0
Growth Adj:	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Initial Bse:		81			0		11			0		0
Added Vol:		11			0		49	107	0	0	45	0
PasserByVol:	0	0	0	0	0	0	288	0	0	0		0
Initial Fut:	0	92	0	0	0	0	337	118	0	0	3	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
PHF Volume:		110			0		402	141	0	0	58	0
Reduct Vol:	0	0		0	0		0	0	0	0	0	0
FinalVolume:	0	110	0	0	0	0	402	141	0	0	58	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	402	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	705	634	110
Potent Cap.:	1168	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	406	377	949
Move Cap.:	1168	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	389	377	949
Volume/Cap:	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.15	0.00	0.03
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1
Control Del:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.9
LOS by Move:		*		*	*		*	*		*	*	A
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	389	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx
Shrd ConDel:	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.9	xxxx	xxxxx
Shared LOS:		*		*	*		*	*		*	*	
ApproachDel:		xxxxxx			xxxxx			xxxxx			13.8	
ApproachLOS:		*			*			*			B	

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 I-10 EB Ramp & Neighbours Blvd

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: C[23.4]

Street Name:	Neighbours Blvd						I-10 EB Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Channel			Include			Channel			Include		
Lanes:	0 0 1	0	1	0 0 0	0	1	0 0 1	0	0	0 0 0	0	1
Volume Module:												
Base Vol:	35		12	0		43	13		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	38		13	0		46	14		0			
Added Vol:	48	58	286	79	0		0		0			
PasserByVol:	0	103	0		0	8	0	3	0	0	0	0
Initial Fut:	86		299	0	0	54	0	17	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.87 0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87 0.87	0.87	0.87	0.87
PHF Volume:	99		345	0		63	20		0			
Reduct Vol:	0	186	0	97	0	0	0	0	0	0	0	0
FinalVolume:	99	0	345	0	0	63	20	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx	4.1	xxxx xxxxx	6.4	6.5	6.2	xxxxx xxxx xxxxx					
FollowUpTim:	xxxxx xxxx xxxxx	2.2	xxxx xxxxx	3.5	4.0	3.3	xxxxx xxxx xxxxx					
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx	99	xxxx xxxxx	978	885	97	xxxx xxxx xxxxx					
Potent Cap.:	xxxx xxxx xxxxx	1507	xxxx xxxxx	280	286	965	xxxx xxxx xxxxx					
Move Cap.:	xxxx xxxx xxxxx	1507	xxxx xxxxx	219	205	965	xxxx xxxx xxxxx					
Volume/Cap:	xxxx xxxx xxxx	0.23	xxxx xxxx	0.29	0.00	0.02	xxxx xxxx xxxx					
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx	0.9	xxxx xxxxx	xxxx xxxx		0.1	xxxx xxxx xxxxx					
Control Del:	xxxxx xxxx xxxxx	8.1	xxxx xxxxx	xxxxx xxxx		8.8	xxxxx xxxx xxxxx					
LOS by Move:	*		A	*		*		A	*			
Movement:	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx			219	xxxx xxxxx		xxxx xxxx xxxxx			
SharedQueue:	xxxxx xxxx xxxxx		0.9 xxxx xxxxx			1.1	xxxx xxxxx		xxxxx xxxx xxxxx			
Shrd ConDel:	xxxxx xxxx xxxxx		8.1 xxxx xxxxx			28.0	xxxx xxxxx		xxxxx xxxx xxxxx			
Shared LOS:	*		A	*		D	*					
ApproachDel:	xxxxxx		xxxxx			23.4			xxxxxx			
ApproachLOS:	*		*			C			*			

Note: Queue reported is the number of cars per lane.

With Project
40% Staggered

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Seeley Ave & Neighbours Blvd

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: B[11.4]

Street Name:	Neighbours Blvd						Seeley Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 0	0	0	0 0 1! 0	0	
Volume Module:												
Base Vol:	86		2	1		1	0		0			
Growth Adj:	1.08 1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08 1.08	1.08	1.08	1.08
Initial Bse:	93		2	1		1	0		0			
Added Vol:	2		2	1		1	0		0			
PasserByVol:	0	90	1	5		149	0		0	0		0
Initial Fut:	95	0	5	6	0	0	0	0	0	0	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00
PHF Adj:	0.89 0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89 0.89	0.89	0.89	0.89
PHF Volume:	106		4	7		168	0		0			
Reduct Vol:	0		0	0		0	0		0			
FinalVolume:	106	0	4	7	0	168	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx		4.1 xxxx xxxxx			7.1	xxxx xxxxx			6.5		
FollowUpTim:	2.2 xxxx xxxxx		2.2 xxxx xxxxx			3.5	xxxx xxxxx			4.0		6.2
Capacity Module:												
Cnflict Vol:	110 xxxx xxxxx		114 xxxx xxxxx			228	xxxx xxxxx			229		
Potent Cap.:	1493 xxxx xxxxx		1488 xxxx xxxxx			731	xxxx xxxxx			674		110
Move Cap.:	1493 xxxx xxxxx		1488 xxxx xxxxx			726	xxxx xxxxx			672		949
Volume/Cap:	0.00 xxxx xxxx		0.00 xxxx xxxx			0.23	xxxx xxxx			0.00	0.00	0.01
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx		0.0 xxxx xxxxx			0.9	xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	7.4 xxxx xxxxx		7.4 xxxx xxxxx			11.4	xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	*		A	*		B	*			*		
Movement:	LT - LTR - RT		LT - LTR - RT			LT - LTR - RT				LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx		xxxx xxxx xxxxx			xxxx xxxx xxxxx				xxxx 798 xxxxx		
SharedQueue:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx xxxx xxxxx				xxxxx 0.1 xxxxx		
Shrd ConDel:	xxxxx xxxx xxxxx		xxxxx xxxx xxxxx			xxxxx xxxx xxxxx				xxxxx 9.6 xxxxx		
Shared LOS:	*		*	*		*				A		
ApproachDel:	xxxxxx		xxxxx			11.4				9.6		
ApproachLOS:	*		*			B				A		

Note: Queue reported is the number of cars per lane.

APPENDIX K
GLARE AND REFLECTION STUDY

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9/29/2011

RENEWABLE RESOURCES GROUP

Renewable Resources Group

Blythe Mesa Solar Project

Glare Study

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POWER ENGINEERS

BLYTHE MESA SOLAR PROJECT
Glare Study

PREPARED FOR: *RENEWABLE RESOURCES GROUP*
PREPARED BY: *POWER ENGINEERS*

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APPENDIX A –TABULAR GLARE RESULTS A-1

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GLARE STUDY FOR THE BLYTHE MESA SOLAR PROJECT

1.0 INTRODUCTION

POWER Engineers, Inc. (POWER) has prepared a Glare Study for Renewable Resources Group's (RRG) Blythe Mesa Solar Project (Project). The Project is located east of the community of Blythe, California and immediately adjacent to and southeast of the Blythe Municipal Airport (See Figure 1). The facility will consist of a multiple arrays of Photovoltaic (PV) solar panels fixed to a single axis solar tracker. Specifically, this study answers the following questions:

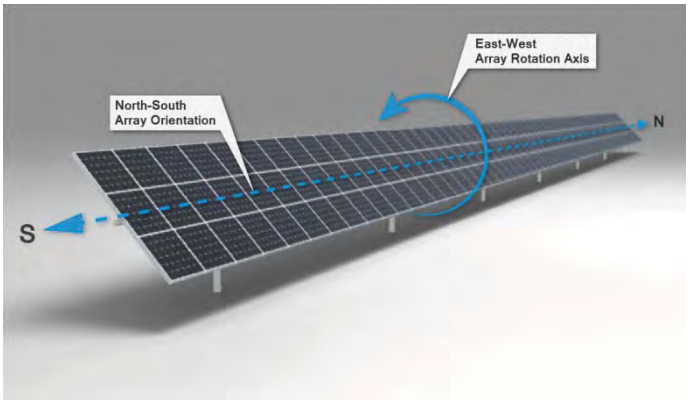
- Will glare from the PV panels be visible to pilots upon their approach on runways 8, 35, 17, 26 and the planned future expansion of Runway 8?
- If the glare is visible, how long will it occur and when will it occur?
- If a glare is visible, will it be in the pilots focused view (60 degree intense focus view or the distorted view 60 degrees to 120 degrees)?
- If the glare is visible, what is it comparable to?

1.1 DEFINITIONS AND DESCRIPTIONS

The following definitions and descriptions are important to understanding the methodology and results of the study:

- **Photovoltaic Panel** – Photovoltaic panels, also known as PV panels, are deigned to absorb solar energy and retain as much of the solar spectrum as possible in order to produce electricity.

- **Single Axis Solar Tracker** - Single axis trackers are designed to maximize the efficiency of a solar operation. PV Panels rotate around a fixed axis, tracking the sun's east/west position throughout the day (See Insert 1)**.**



INSERT 1 – SINGLE AXIS SOLAR TRACKER

- **Glare -** A continuous source of brightness, relative to diffuse or surface scattered lighting. This is also referred to as the suns reflection (see Insert 2).



INSERT 2 – EXAMPLES OF GLARE

- **3D Geometric Analysis** – A computer simulation incorporating a 3D terrain model, 3D solar equipment, single axis solar tracker behavior and a solar algorithm to determine the date, time and duration of glare which may be visible during the landing approach.

- **Landing Approach** – The path of decent of an aircraft relative to the runway.



BLYTHE MESA SOLAR SITE

FIG. 1 - VICINITY MAP

Proposed Solar Panels | Proposed Project Boundary | Blythe Airport Runway

1.2 METHODOLOGY

POWER used the following methodology to determine if glare will be visible:

1. *Identify Potential Glare Issues* – POWER studied the landing approach for all four runways utilized at the Blythe Municipal Airport. Additionally, POWER studied the proposed lengthened section of Runway 8, and any potential glare issues that may present themselves. POWER prepared the study based on these locations (see Section 1.2.1).

2. *Characterize Glare Behavior* – At each landing approach, 3D simulations were developed to accurately create and study glare based on the behavior of the SunPower single axis solar tracker (See Section 1.2.2). 3D elements within the digital scene included terrain models, cone of vision, runway GPS coordinates, 3D solar equipment and a 3D sun system. This information was assembled in a 3D computer program to create an accurate virtual representation of the Project and surrounding area (see Section 1.2.3).

3. *Evaluate* – Visual analysts studied the 3D simulations under different lighting conditions, and at different times of the year. These simulations were used to evaluate and document when glare may be visible along the various landing approaches. Results of this evaluation can be found in Section 1.3.

1.2.1 Potential Glare Issues – Landing Approaches

Potential solar operations were studied along the six landing approach scenarios (see Figure 2). Riverside County Airport Land Use Commission's (ALUC) Planning Staff, as the lead permitting agency, provided the team with a document titled "*45-Vol.3 Blythe Municipal.pdf*" which was used in developing our 3D geometry of the landing approaches. POWER used the information derived from the aforementioned document to develop the glare analysis to perform the Glare Study (see Results, Appendix A). Each landing approach is described below:

- **Runway 35:** Northbound approach
  - Length: 5,820 feet
  - Visual Approach Aid: Rotating Beacon
  - Approach: 3 degrees

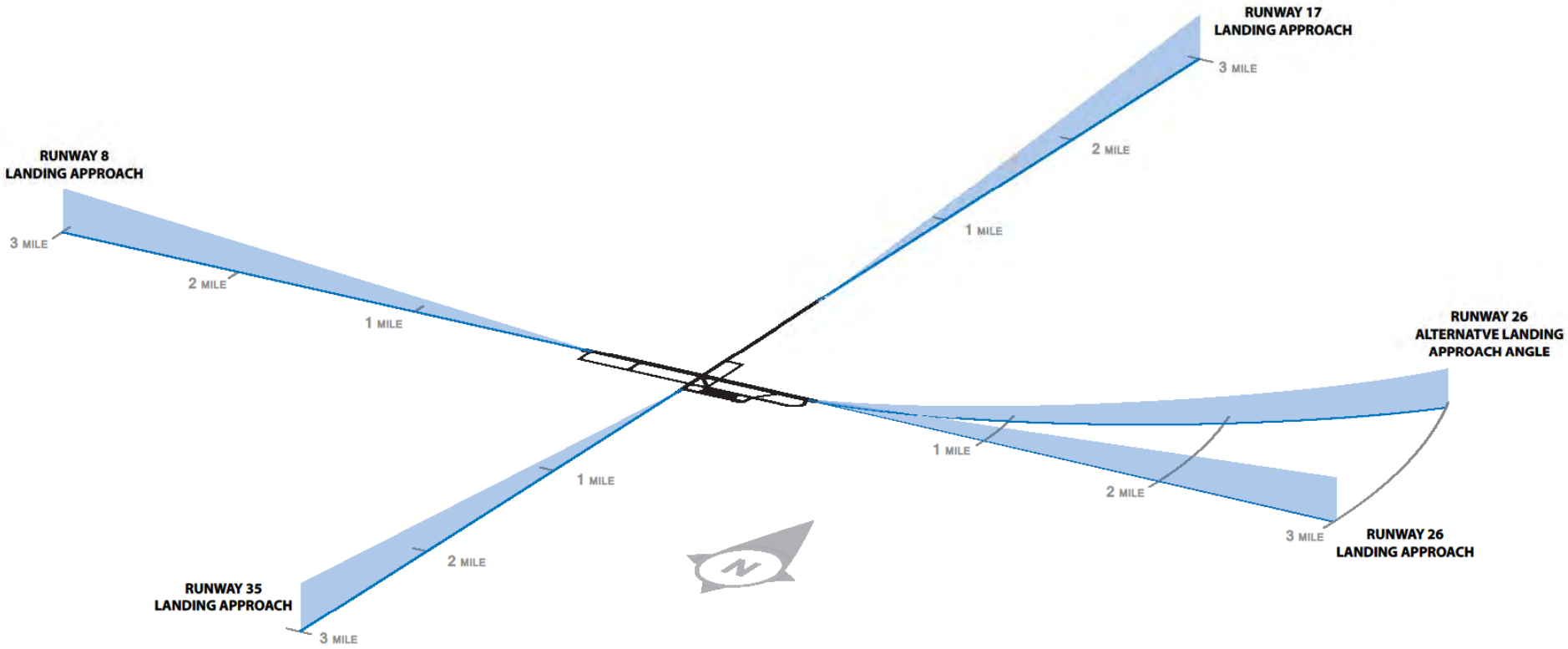
- **Runway 8 - existing:** Eastbound approach
  - Length: 6,562 feet
  - Visual Approach Aid: Rotating Beacon
  - Approach: 3 degrees

- **Runway 8 – proposed extension:** Eastbound approach and its associated extension of roughly 3,500 lineal feet.

- **Runway 17:** Southbound approach
  - Length: 5,820 feet
  - Visual Approach Aid: Rotating Beacon
  - Approach: 3 degrees

- **Runway 26:** Westbound approach
    - Length: 6,562 feet
    - Visual Approach Aid: Rotating Beacon
    - Approach: 3 degrees
    - Instrument Approach Procedures:
        - Circling Approach: 8.4 degrees

- **Runway 26 – Alternate Approach Angle:** Westbound runway with alternate 25-degree offset, right of center.
    - Length: 6,562 feet
    - Visual Approach Procedures:
        - Rotating Beacon for Visual Aid
        - Approach: 3 degrees
    - Instrument Approach Procedures:
        - Straight-in Approach:
            - Approach: 6.9 degrees
            - Approach course aligned 25 degrees right of runway centerline
        - Circling Approach: 8.4 degrees



BLYTHE MESA SOLAR SITE

FIG. 2 - LANDING APPROACHES

1.2.2 Characterize Glare Behavior - Single Axis Solar Tracker

In order to characterize glare behavior, POWER created a 3D representation of the site, the sun and the single axis solar trackers. The 3D Model allowed analysts to accurately determine when and where glare may be visible to pilots. Specifically, the 3D Model incorporated the following:

- **3D Terrain Models** – RRG provided 5-foot contours of the Project site. This information was converted into a 3D surface model and used for placement and elevation of the proposed solar arrays.

- **Runway GPS Coordinates** – ALUC's aforementioned document provided GPS coordinates for each of the runways.

- **Solar Sun System** – The 3D computer simulations incorporated an accurate, solar algorithm based on the latitude and longitude of the actual Project. All calculations were performed using 3D software, designed for calculating and animating solar cycles. Sun calculations and results were based on hours of operational daylight and solar clocks for the following times of year:

    - Summer Solstice (June 21st, 2011) – Where the length of sunlight hours are at its peak and the sun has reached its northernmost extremes.
    - Winter Solstice (December 22nd, 2011) – Where the length of sunlight hours are at its lowest and the sun has reached its southernmost extremes.
    - Fall Equinox (September 23rd, 2011) – Where the day and night are equal in length.
    - Spring Equinox (March 20th, 2011) – Where the day and night are equal in length.

- **3D Solar Equipment** – RRG provided electronic CAD data for the location of the proposed solar arrays. Additional CAD information collected included panel design, panel height, panel orientation, backtracking and tilt (-45/+45 degrees). It is important to note the 3D geometric analysis does not measure the intensity of glare, and is focused specifically on the location, duration and conditions in which glare may occur (please refer to Section 1.4 Discussion and Conclusions, regarding solar panel glare intensity).

  SunPower's Single Axis Solar Tracker has three primary positions: tracking, backtracking, and stow positions. In addition to the three primary positions, trackers also have a 'wake up' procedure that brings the tracker out of the stow position and into alignment with the sun to begin tracking. These are characterized by the graphic (see Figure 3) and by the following descriptions:

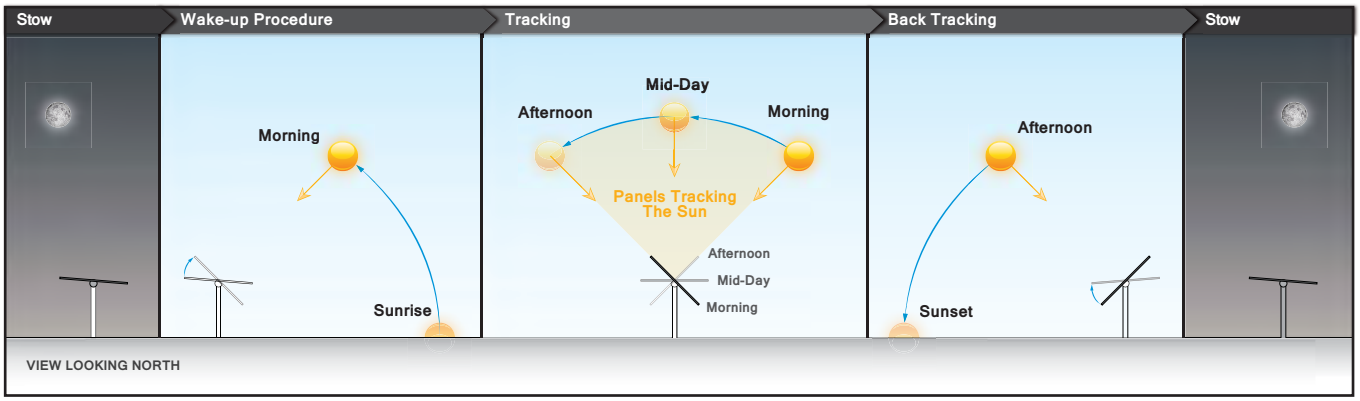
    - **Tracking** – The process by which the solar array maintains a 90 degree relationship with the angle of the sun.

    - **Backtracking** – Backtracking is the process by which solar arrays rotate away from 90 degrees relative to the sun to ensure shading of the adjacent array is not occurring. This occurs at the beginning and end of the day when the sun is low on the horizon (see Figure 4).

- **Stow –** During evening hours and high wind conditions (in excess of 90 miles per hour) the solar arrays move into a position of five to ten degrees off of parallel to the ground surface.

Additionally, the general behavior of SunPower's single axis solar tracker, used for our study purposes is as such:

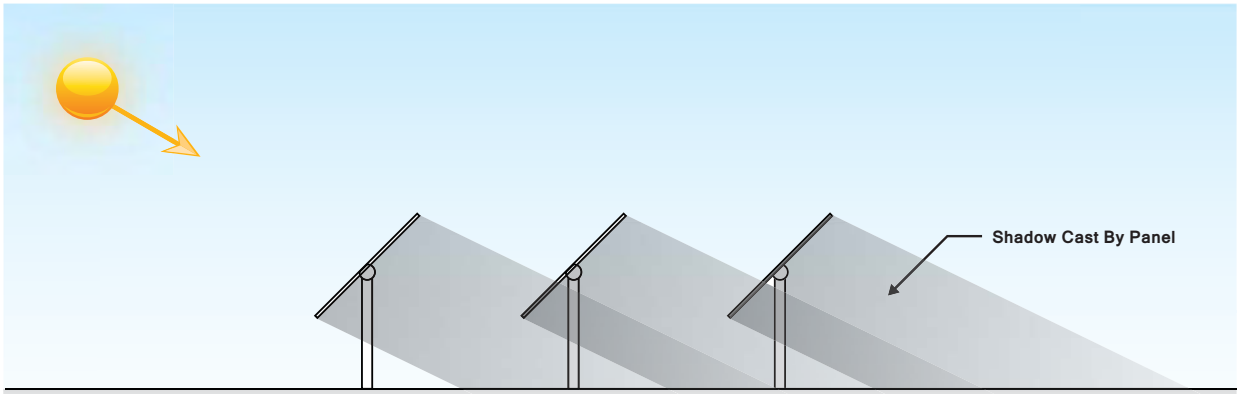
- The full range of motion of the panels will be -45 degrees to +45 degrees.
- Once the sun rises, the trackers will slowly rotate into a +45 degree angle, facing east.
- They are not moved into a +45 degree east facing angle prior to the sun rising to prevent panel shading.
- When the sun is perpendicular (90 degrees) to the panels, they will begin to track the sun throughout the day.
- When the panels reach a -45 degree angle, facing west, they will stop tracking the sun and slowly start to rotate back to a five to ten degree east facing angle.



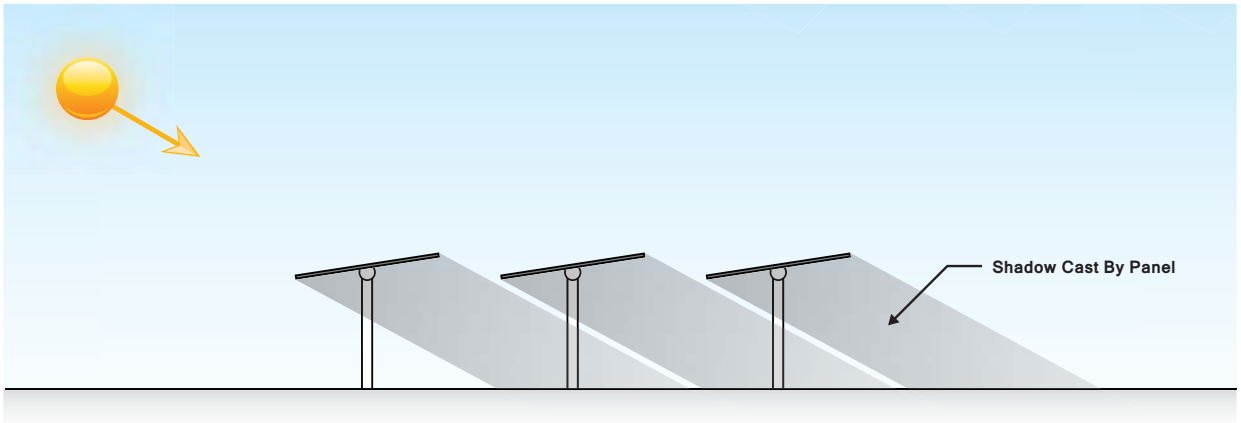
BLYTHE MESA SOLAR SITE

FIG. 3 - SINGLE AXIS SOLAR TRACKER POSITIONING

Panels *without* Back Tracking



Panels *with* Back Tracking



BLYTHE MESA SOLAR SITE

FIG. 4 - BACK TRACKING

1.2.3 Glare Evaluation - 3D Geometric Analysis

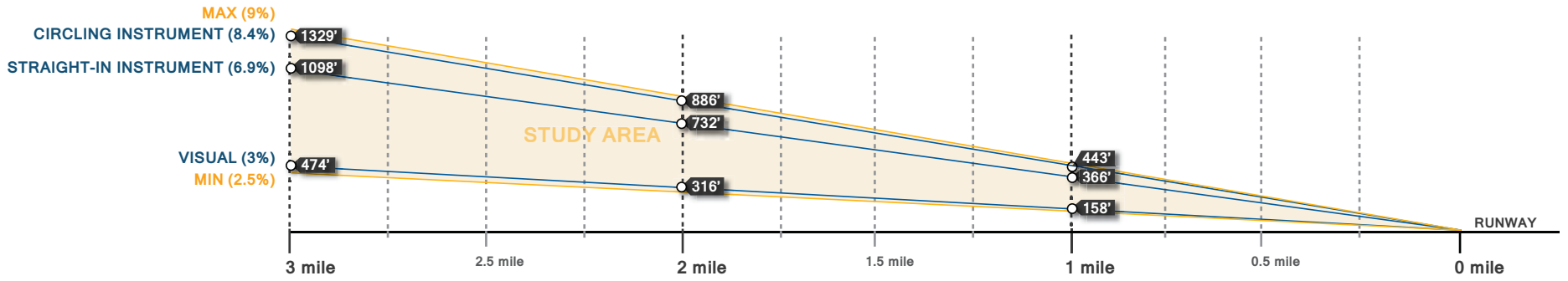
Once the 3D site was assembled, analysts animated the movement of the sun, and the behavior of the single axis trackers. Studying the occurrence of glare is essentially a geometric analysis, which takes into account the position of the sun in relation to the angle of the solar panels to emit a path of glare. Each landing approach was studied to determine if glare would cross into the pilots view. This was done for each landing approach for a full day during spring, summer, fall and winter.

In addition to location, time and duration of glare, analysts also recorded the location within our cone of vision, along the landing approach path, where glare may be experienced. Analysts studied multiple landing approach scenarios, with air traffic potentially landing at an angle of 2.5% to 9% relative to the runway surface. This encompasses the three approach scenarios outlined in ALUC's aforementioned document of a visual approach (VOR), straight-in instrument approach (DME/GPS), or circling instrument approach (see Figure 5).

The human eye has two primary cones of vision; the intense focus view, and the distorted view (see Figure 6**)**.

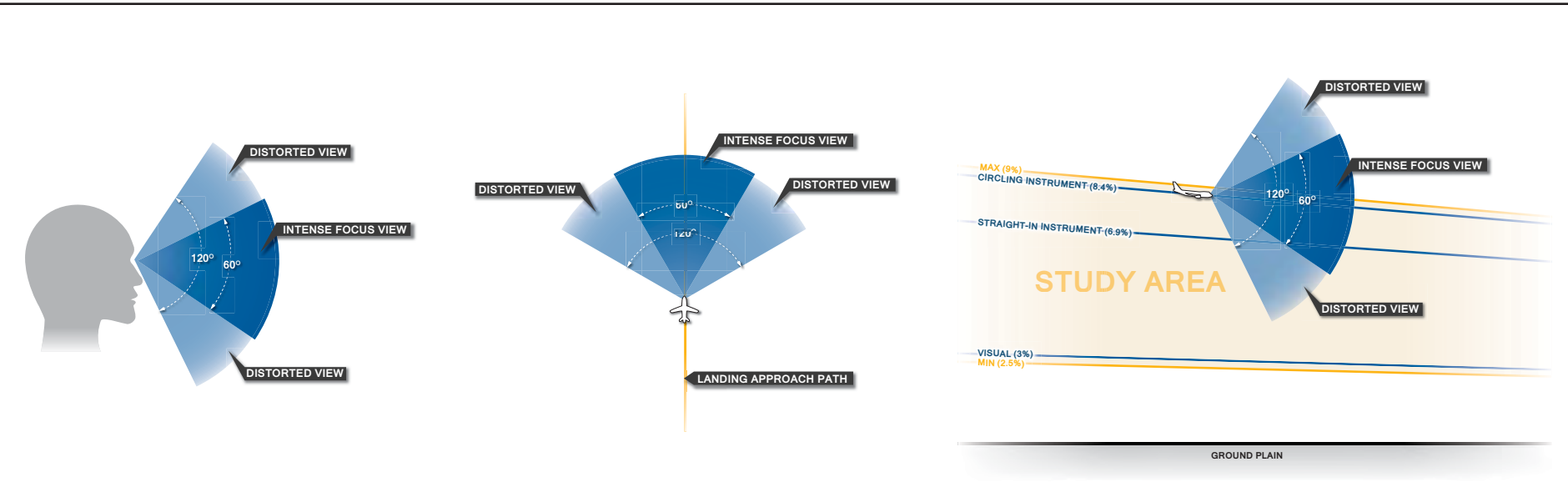
- Intense Focus View: 30 degrees left, right, top and bottom of center (total of 60 degree viewing area). Focal vision provides high resolution, detailed vision for identifying and evaluating important information, such as hazards.

- Distorted View: Outside of the Intense Focus View, another 60 degrees is the distorted view (or peripheral view). Items in this area of the viewer's vision do not affect the viewer's sight with the same intensity as those within the Intense Focus View. Distorted vision provides information on motion, locations and locomotion. If something catches our attention from the periphery system, we turn our eyes to focus on its details.



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FIG. 5 - APPROACH SLOPE STUDY AREA



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FIG. 6 - CONE OF VISION

1.3 RESULTS

Glare Results: Review of the 3D geometric analysis determined glare will be limited to those with westerly views (Runway 26), and northerly views (Runway 35). For Runway 26, glare may be present mid-morning and just before sunset, year round with varying lengths of duration. Duration of glare ranged from 1/2 hour to 4 1/2 hours, depending on angle of decent, and angle of approach relative to the runway's orientation. Glare for air traffic approaching Runway 35 is limited to one hour or less at sunrise, and one hour or less at sunset during summer months only. The following is a detailed description of glare results along each landing approach (see Appendix A for Tabular results).

- **Runway 35 (looking north):** Pilots may experience glare during summer months in a northeasterly direction between the hours of 5:00 a.m. and 6:00 a.m., and again in a northwesterly direction between the hours of 7:00 p.m. and 8:00 p.m. Glare will be limited to distorted views only, and would be visible from 1.0 mile to 2.5 miles away.
- **Runway 17 (looking south):** No glare is anticipated
- **Runway 8 – existing conditions (looking east):** No glare is anticipated
- **Runway 8 – proposed lengthening (looking east):** No glare is anticipated
- **Runway 26 (looking west):** Pilots may experience brief periods of glare throughout the year. Glare will be experienced from the following:
    - **Spring -** Glare may be experienced at 8:30 a.m. to 11:00 a.m. in the pilots distorted view within 1.25 to 2.5 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 6:30 p.m. in the focused view within 1.5 to 2.5 miles away from the runway.
    - **Summer –** Glare may be experienced at 7:00 a.m. to 10:00 a.m. in the pilots distorted view within 1.25 to 2.0 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 7:30 p.m. in the focused view within 1.5 to 2.0 miles away from the runway.
    - **Fall -** Glare may be experienced at 8:00 a.m. to 10:30 a.m. in the pilots distorted view within 1.25 to 2.0 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 6:00 p.m. to 6:30 p.m. in the distorted and focused views within 1.5 to 2.5 miles away from the runway.
    - **Spring –** Glare may be experienced at 9:30 a.m. in the pilots distorted view from 1.25 to 2.5 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 6:30 p.m. in the focused view from 1.5 to 2.5 miles away from the runway.
- **Runway 26 approach with 25 degree offset (looking west by south-west):** Pilots may experience brief periods of glare throughout the year. Glare will be experienced during the following periods.
    - **Spring -** Glare may be experienced at 7:00 a.m. to 11:00 a.m. in the pilots distorted view within 1.5 to 2.0 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 6:30 p.m. in the focused view within 0.5 to 2.5 miles away from the runway.

- **Summer –** Glare may be experienced at 7:00 a.m. to 10:00 a.m. in the pilots distorted view within 0.5 to 2.0 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 7:30 p.m. in the distorted view within 0.5 to 2.0 miles away from the runway.
- **Fall -** Glare may be experienced at 8:00 a.m. to 11:30 a.m. in the pilots distorted view within 1.25 to 2.0 miles from the runway. Pilots may experience approximately one hour of glare from 6:00 p.m. to 7:00 p.m. in the focused views within 0.5 to 2.5 miles away from the runway.
- **Spring –** Glare may be experienced at 7:00 a.m. to 11:00 a.m. in the pilots distorted view from 0.5 to 2.25 miles from the runway. Pilots may experience approximately 0.5 hour of glare at 4:00 p.m. to 5:00 p.m. within the focused view from 0.5 to 3.0 miles away from the runway.

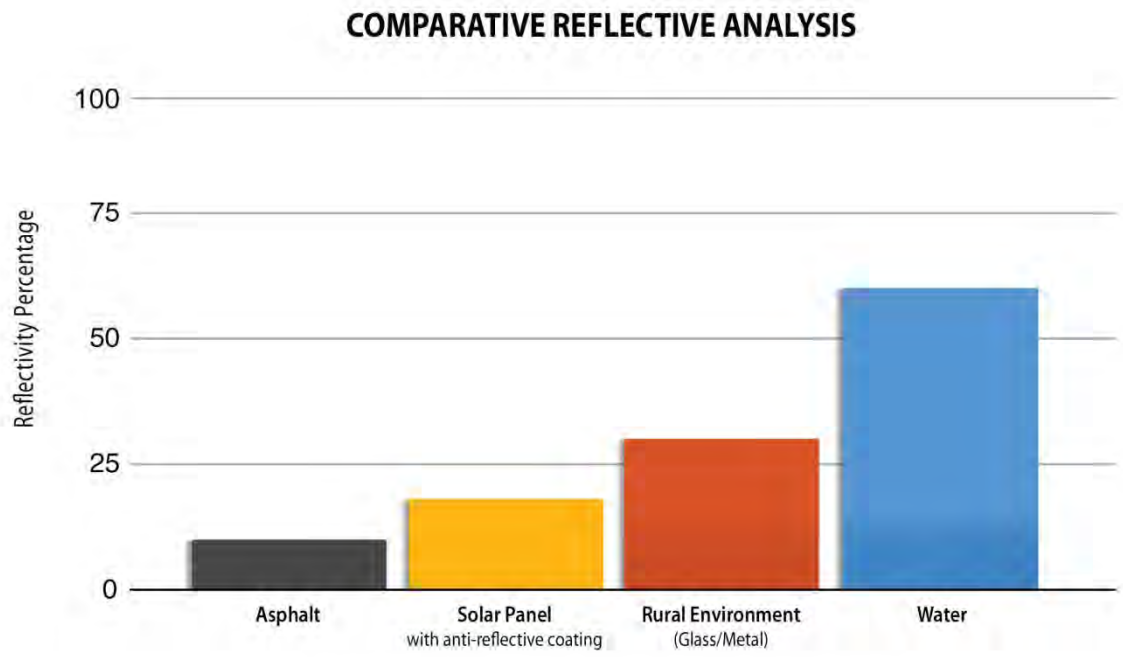
1.4 DISCUSSION AND CONCLUSIONS

1.4.1 Impacts to Landing Approaches (Relating to Glare)

Glare resulting from the sun's reflection on PV panels is often times perceived as being a distraction for motorists or air traffic, and may cause eye damage resulting from prolonged exposure. However, a PV panel is designed to absorb approximately 70% of solar energy and convert it directly to electricity, resulting in reflectance levels much lower than that of other common reflective surfaces.

As determined in a recent technical notification, completed by SunPower Corporation, September 29, 2009 regarding glare and reflectance levels from PV systems, "The glare and reflectance levels from a given PV system are decisively lower than the glare and reflectance generated by standard glass and other common reflective surfaces." The graph below compares the percentage of reflected energy from common reflective surfaces to that of a solar panel.

The geometric analysis shows that during certain times of the year, glare will intersect landing approach on Runway 35 and Runway 26. Most glare is limited to early morning or late evening landings, located in the pilots' distorted view and beyond 0.5 mile of the end of the runway. This glare is not concentrated, and would be similar to or less in intensity to that experienced by pilots making airport approaches or takeoffs over bodies of water.



SunPower Corporation, (2009) SunPower Solar Module Glare And Reflectance

1.5 SOURCES

Riverside County ALUCP. 2004. *East County Airports Background Data. October 2004. (Chapter E3.)*

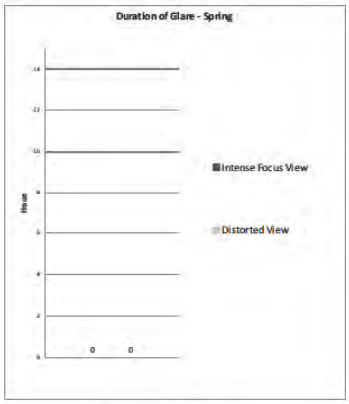
SunPower Corporation. 2009. *SunPower Solar Module Glare and Reflectance Report. September 2009.*

APPENDIX A –TABULAR GLARE RESULTS

RUNWAY 35 APPROACH GLARE ANALYSIS SPRING

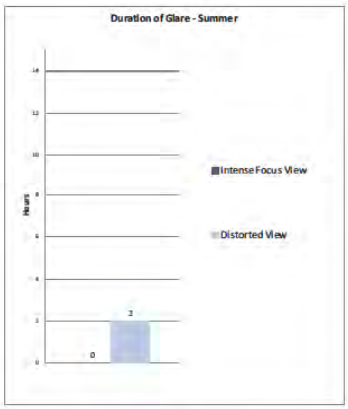
APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
2 1/4 to 2 1/2 Miles																														
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1 1/4 to 1 1/2 Mile																														
1 to 1 1/4 Mile																														
3/4 to 1 Mile																														
1/2 to 3/4 Mile																														
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														

NO GLARE OBSERVED



RUNWAY 35 APPROACH GLARE ANALYSIS SUMMER

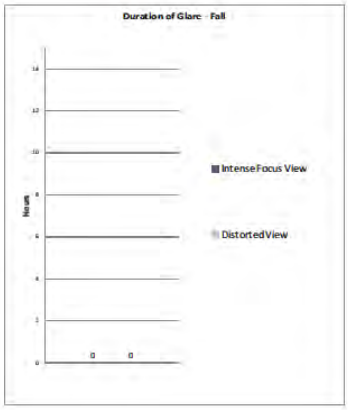
APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles	NE																													
2 1/4 to 2 1/2 Miles	NE																													
2 to 2 1/4 Miles	NE																													
1 3/4 to 2 Miles	NE																													
1 1/2 to 1 3/4 Mile	NE	NE																											NW	NW
1 1/4 to 1 1/2 Mile	NE	NE																											NW	NW
1 to 1 1/4 Mile	NE	NE																												
3/4 to 1 Mile																														
1/2 to 3/4 Mile																														
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



RUNWAY 35 APPROACH GLARE ANALYSIS FALL

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
2 1/4 to 2 1/2 Miles																														
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1 to 1 1/4 Mile																														
3/4 to 1 Mile																														
1/2 to 3/4 Mile																														
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														

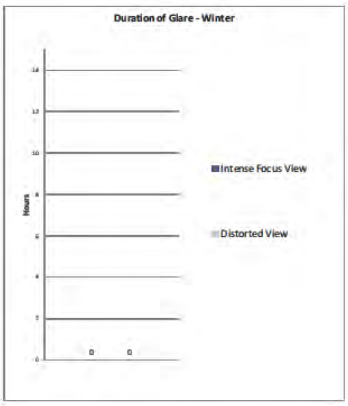
NO GLARE OBSERVED



RUNWAY 35 APPROACH GLARE ANALYSIS WINTER

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
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1/4 to 1/2 Mile																														
0 to 1/4 Mile																														

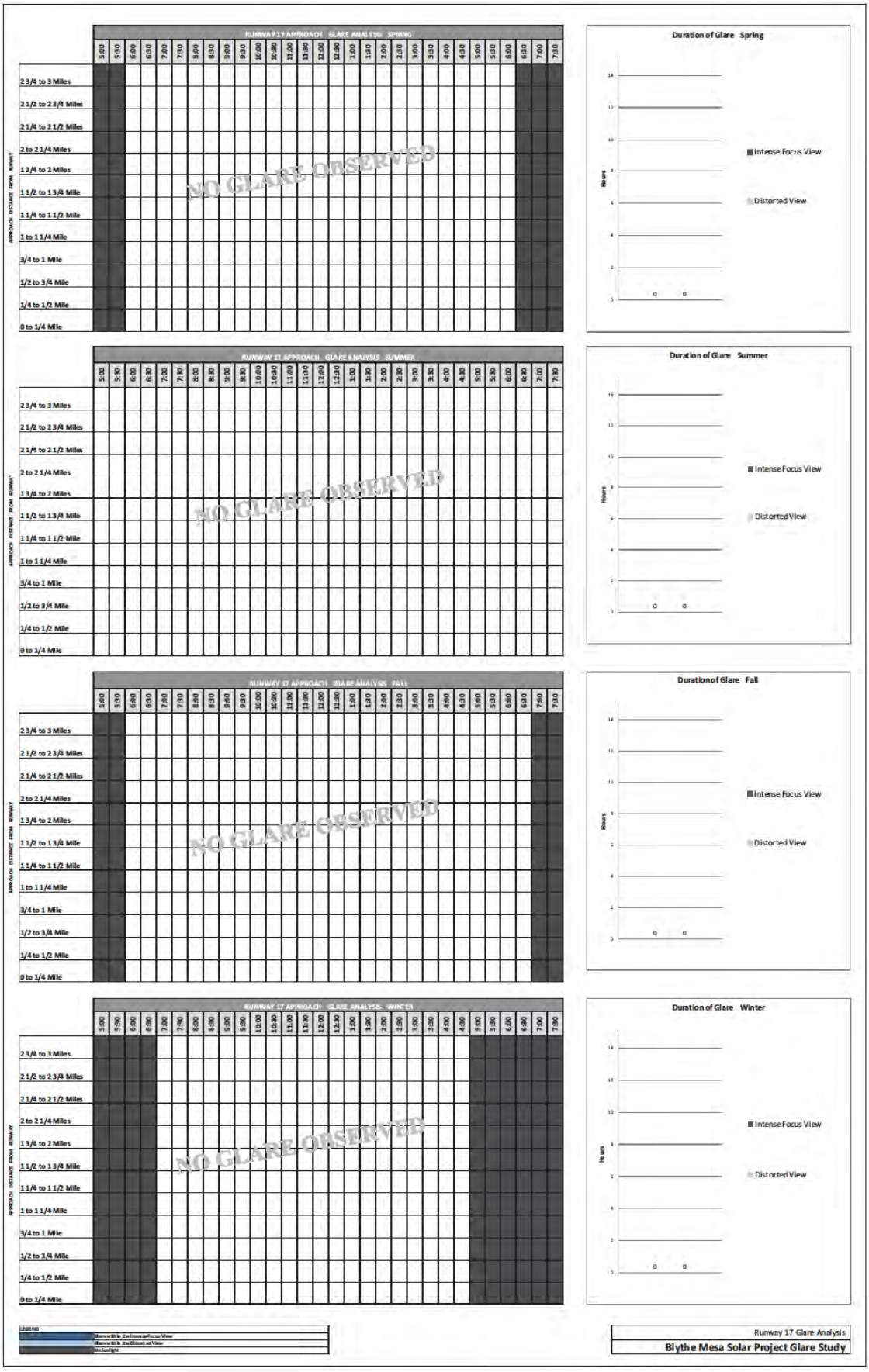
NO GLARE OBSERVED

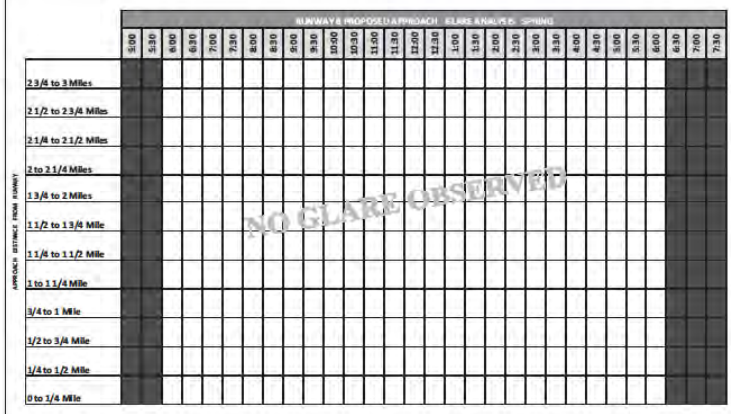


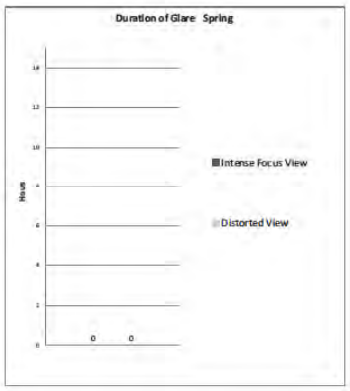
Glare within the Intense Focus View
Glare within the Distorted View
Non-Sunlight

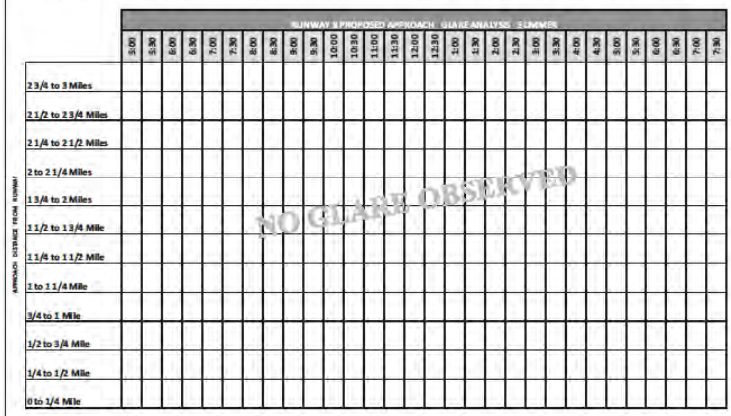
Runway 26 Alternate Approach Angle Glare Analysis

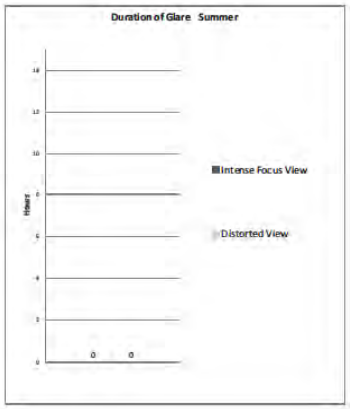
Blythe Mesa Solar Project Glare Study

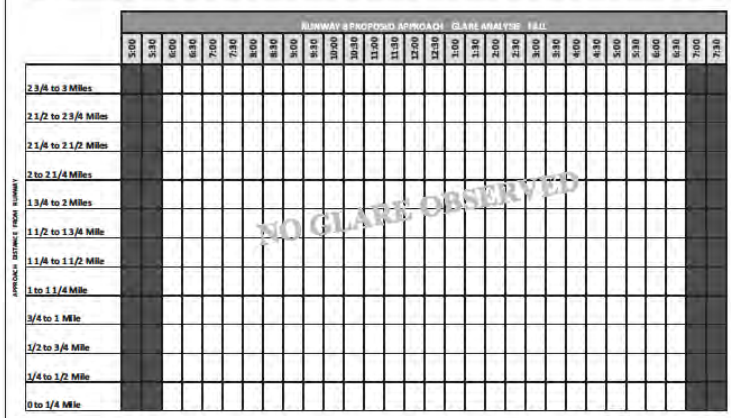

RUNWAY 17 APPROACH GLARE ANALYSIS SPRING
5:00 5:30 6:00 6:30 7:00 7:30 8:00 8:30 9:00 9:30 10:00 10:30 11:00 11:30 12:00 12:30 1:00 1:30 2:00 2:30 3:00 3:30 4:00 4:30 5:00 5:30 6:00 6:30 7:00 7:30
APPROACH DISTANCE FROM RUNWAY
2 3/4 to 3 Miles
2 1/2 to 2 3/4 Miles
2 1/4 to 2 1/2 Miles
2 to 2 1/4 Miles
1 3/4 to 2 Miles
1 1/2 to 1 3/4 Mile
1 1/4 to 1 1/2 Mile
1 to 1 1/4 Mile
3/4 to 1 Mile
1/2 to 3/4 Mile
1/4 to 1/2 Mile
0 to 1/4 Mile
NO GLARE OBSERVED
Duration of Glare Spring
Hours
Intense Focus View
Distorted View
RUNWAY 17 APPROACH GLARE ANALYSIS SUMMER
NO GLARE OBSERVED
Duration of Glare Summer
RUNWAY 17 APPROACH GLARE ANALYSIS FALL
NO GLARE OBSERVED
Duration of Glare Fall
RUNWAY 17 APPROACH GLARE ANALYSIS WINTER
NO GLARE OBSERVED
Duration of Glare Winter
LEGEND
Glare with the Intense Focus View
Glare with the Distorted View
No Ocular Impact
Runway 17 Glare Analysis
Blythe Mesa Solar Project Glare Study

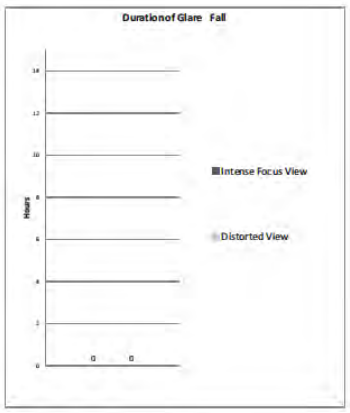


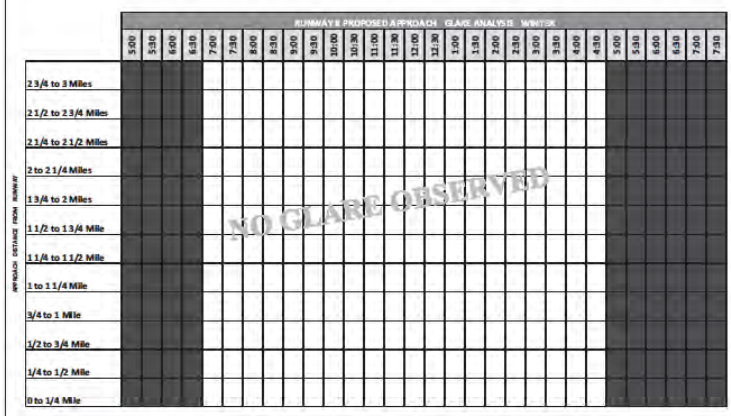


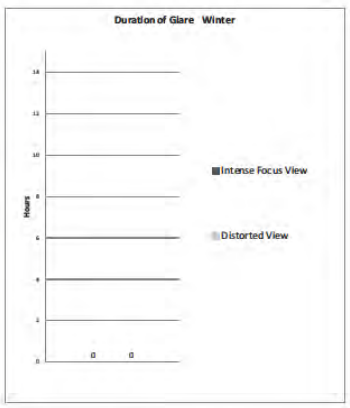








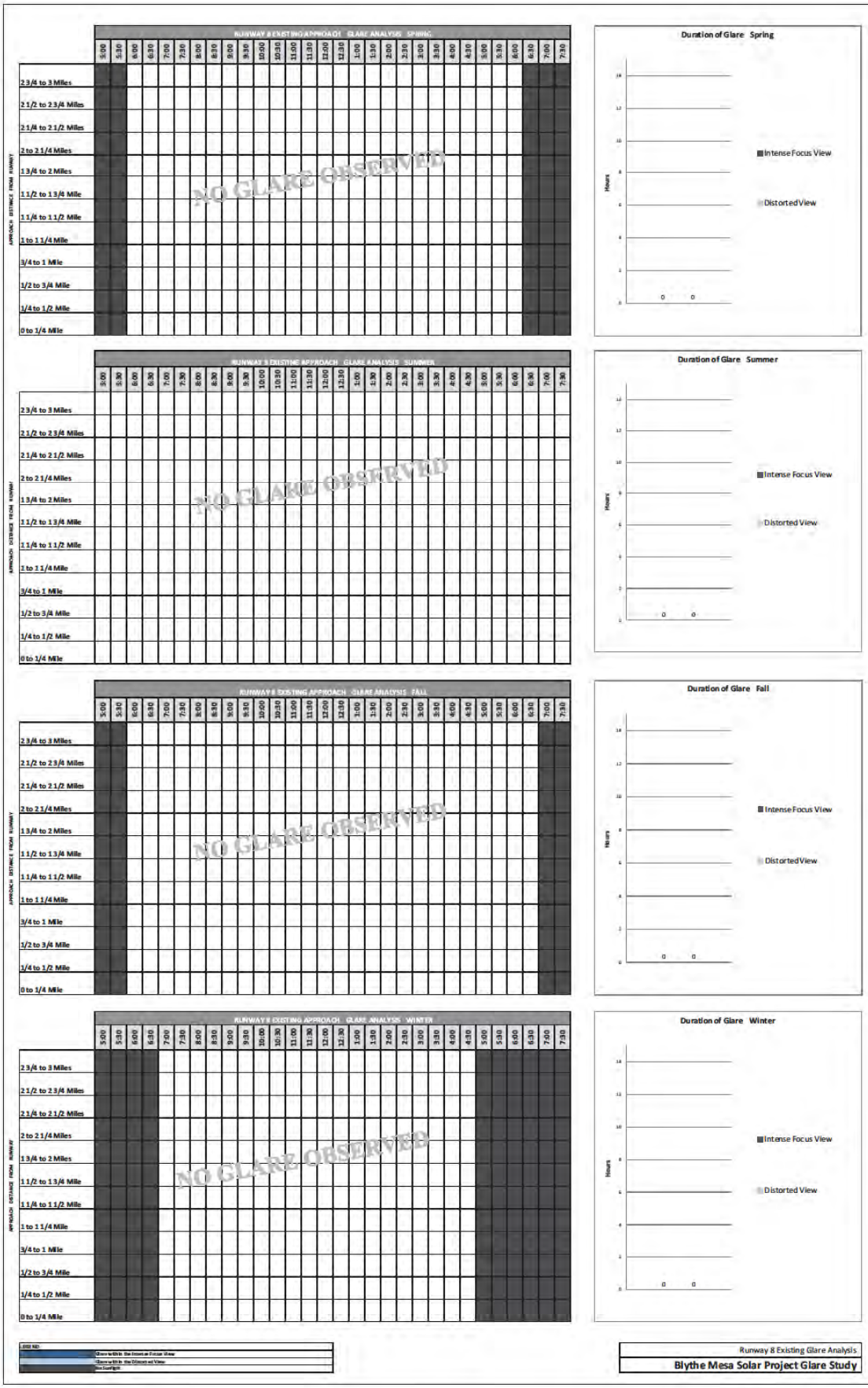




LEGEND	
	Glare with the Intense Focus View
	Glare with the Distorted View
	No Glare

Runway 8 Proposed Extension Glare Analysis

Blythe Mesa Solar Project Glare Study

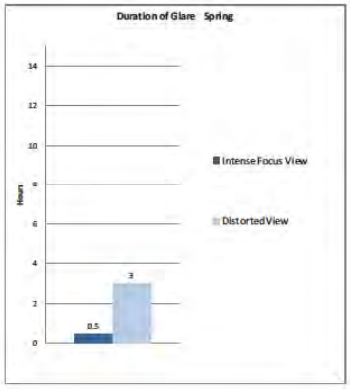


Runway 8 Existing Glare Analysis

Blythe Mesa Solar Project Glare Study

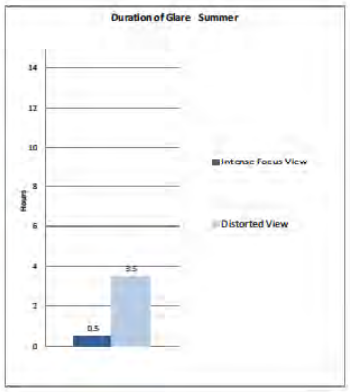
RUNWAY 26 APPROACH GLARE ANALYSIS SPRING

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
2 1/4 to 2 1/2 Miles																												W		
2 to 2 1/4 Miles								SW	SW	SW	SW	SW	SW															W		
1 3/4 to 2 Miles								SW	SW	SW	SW	SW	SW															W		
1 1/2 to 1 3/4 Mile								SW	SW	SW	SW	SW	SW															W		
1 1/4 to 1 1/2 Mile										SW	SW	SW	SW																	
1 to 1 1/4 Mile																														
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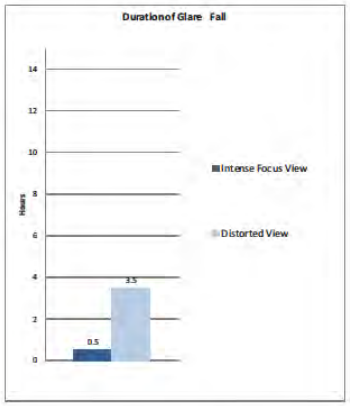
RUNWAY 26 APPROACH GLARE ANALYSIS SUMMER

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
2 1/4 to 2 1/2 Miles																														
2 to 2 1/4 Miles							NW	NW	W	W	W	W	SW																	NW
1 3/4 to 2 Miles							NW	NW	W	W	W	W	SW																	NW
1 1/2 to 1 3/4 Mile							NW	NW	W	W	W	W	SW																	NW
1 1/4 to 1 1/2 Mile																														
1 to 1 1/4 Mile																														
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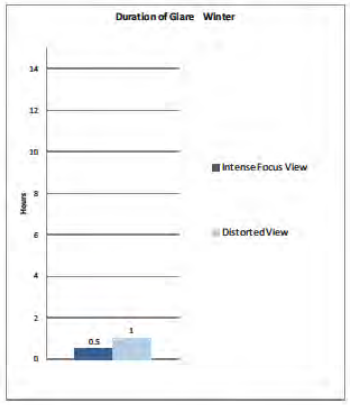
RUNWAY 26 APPROACH GLARE ANALYSIS FALL

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																												W		
2 1/2 to 2 3/4 Miles																												W		
2 1/4 to 2 1/2 Miles																												W		
2 to 2 1/4 Miles							SW	SW	SW	SW	SW	SW															W	W		
1 3/4 to 2 Miles							SW	SW	SW	SW	SW	SW															W	W		
1 1/2 to 1 3/4 Mile							SW	SW	SW	SW	SW	SW															W	W		
1 1/4 to 1 1/2 Mile							SW	SW	SW	SW	SW	SW																		
1 to 1 1/4 Mile																														
3/4 to 1 Mile																														
1/2 to 3/4 Mile																														
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



RUNWAY 28 APPROACH GLARE ANALYSIS WINTER

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																							SW							
2 1/4 to 2 1/2 Miles																							SW							
2 to 2 1/4 Miles										SW													SW							
1 3/4 to 2 Miles										SW													SW							
1 1/2 to 1 3/4 Mile										SW													SW							
1 1/4 to 1 1/2 Mile										SW													SW							
1 to 1 1/4 Mile																														
3/4 to 1 Mile																														
1/2 to 3/4 Mile																														
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



LEGEND

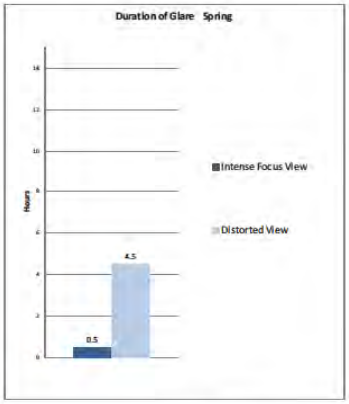
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	Glare with in the Distorted View
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Runway 26 Glare Analysis

Blythe Mesa Solar Project Glare Study

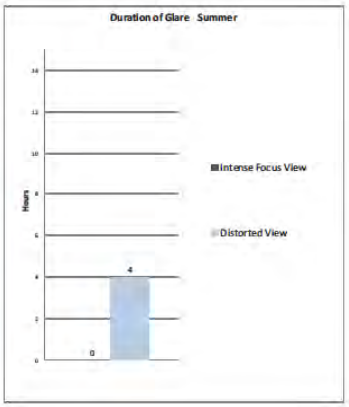
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2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																												W		
2 1/4 to 2 1/2 Miles																												W		
2 to 2 1/4 Miles								SW	SW	SW	SW	SW																W		
1 3/4 to 2 Miles						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
1 1/2 to 1 3/4 Mile						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
1 1/4 to 1 1/2 Mile						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
1 to 1 1/4 Mile						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
3/4 to 1 Mile						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
1/2 to 3/4 Mile						SW	SW	SW	SW	SW	SW	SW	SW	SW														W		
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



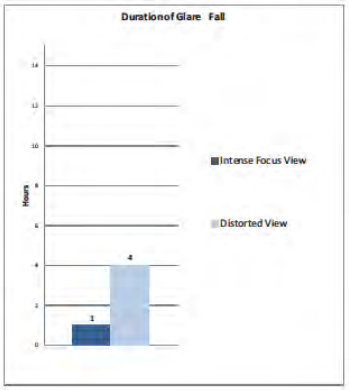
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2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																														
2 1/4 to 2 1/2 Miles																														
2 to 2 1/4 Miles																														NW
1 3/4 to 2 Miles						SW	SW	SW	SW	SW	SW	SW																		NW
1 1/2 to 1 3/4 Mile						SW	SW	SW	SW	SW	SW	SW																		NW
1 1/4 to 1 1/2 Mile						SW	SW	SW	SW	SW	SW	SW																		NW
1 to 1 1/4 Mile						SW	SW	SW	SW	SW	SW	SW																		NW
3/4 to 1 Mile						SW	SW	SW	SW	SW	SW	SW																		NW
1/2 to 3/4 Mile						SW	SW	SW	SW	SW	SW	SW																		NW
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



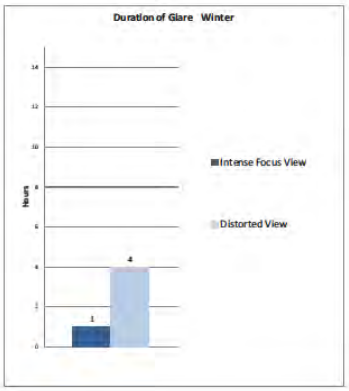
RUNWAY 26 ALTERNATE APPROACH ANGLE GLARE ANALYSIS FALL

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																														
2 1/2 to 2 3/4 Miles																											W	W		
2 1/4 to 2 1/2 Miles																											W	W		
2 to 2 1/4 Miles									SW	SW	SW	SW															W	W		
1 3/4 to 2 Miles								SW	SW	SW	SW	SW	SW	SW	S												W	W		
1 1/2 to 1 3/4 Mile								SW	SW	SW	SW	SW	SW	SW	S												W	W		
1 1/4 to 1 1/2 Mile								SW	SW	SW	SW	SW	SW	SW	S												W	W		
1 to 1 1/4 Mile								SW	SW	SW	SW	SW	SW	SW	S												W	W		
3/4 to 1 Mile								SW	SW	SW	SW	SW	SW	SW	S												W	W		
1/2 to 3/4 Mile								SW	SW	SW	SW	SW	SW	SW	S												W	W		
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



RUNWAY 26 ALTERNATE APPROACH ANGLE GLARE ANALYSIS WINTER

APPROACH DISTANCE FROM RUNWAY	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30
2 3/4 to 3 Miles																								SW						
2 1/2 to 2 3/4 Miles																								SW						
2 1/4 to 2 1/2 Miles																							SW	SW						
2 to 2 1/4 Miles								SW	SW	SW	SW	S	S										SW	SW						
1 3/4 to 2 Miles						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
1 1/2 to 1 3/4 Mile						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
1 1/4 to 1 1/2 Mile						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
1 to 1 1/4 Mile						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
3/4 to 1 Mile						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
1/2 to 3/4 Mile						SW	SW	SW	SW	SW	SW	S	S										SW	SW						
1/4 to 1/2 Mile																														
0 to 1/4 Mile																														



LEGEND

	Glare with in the Intense Focus View.
	Glare with in the Distorted View.
	No Glare

Runway 26 Alternate Approach Angle Glare Analysis

Blythe Mesa Solar Project Glare Study

APPENDIX L
LAND EVALUATION AND SITE ASSESSMENT

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D R A F T

BLYTHE MESA SOLAR PROJECT LAND EVALUATION AND SITE ASSESSMENT

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SECTION 1 INTRODUCTION

Appendix G of the California Environmental Quality Act (CEQA) Guidelines were amended to identify the California Land Evaluation and Site Assessment (LESA) Model as an optional methodology to access impacts on agriculture and farmland. Based on the current use of the Blythe Mesa Solar Project site as both active and inactive agriculture, the LESA Model was prepared for the Blythe Mesa Solar Project (or Project).

The LESA model provides an approach for rating the relative quality of land resources based upon specific measurable features. The LESA Model is composed of six different factors. Two Land Evaluation factors (Land Use Capability Classification and Storie Index) are based upon measures of soil resource quality. Four Site Assessment factors provide measures of a project's size, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. Each of these factors is combined, resulting in several numeric scores. The factors are then weighted relative to one another so that 50 percent of the total LESA score is derived from the Land Evaluation factors, and 50 percent from the Site Assessment factors. The weighted total results in a single numeric score, with a maximum attainable score of 100 points (California DOC, 1997). This project score can be used as a basis for making a determination of a project's significance on agriculture and farmland, based upon a range of established scoring thresholds. Table 1 presents the LESA Model scoring thresholds.

Table 1
California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if Land Evaluation and Site Assessment subscores are each greater than or equal to 20 points
60 to 79 Points	Considered Significant unless either Land Evaluation or Site Assessment subscore is less than 20 points
80 to 100 Points	Considered Significant

Source: California Department of Conservation, 1997.

SECTION 2 PROJECT DESCRIPTION

2.1 ENVIRONMENTAL SETTING

The Project site is located on approximately 3,613 acres of privately owned land zoned for agricultural production in eastern Riverside County. The Project site is located in the Palo Verde Valley area of the County, which is an intensively farmed agricultural region. A portion of the Project transmission line is located onsite, and the offsite portion (approximately five miles) is located on Bureau of Land Management (BLM) administered lands designated as a Utility Corridor. The offsite portion of the transmission line is proposed within an existing/developed transmission line corridor, and is therefore not included in the Project site assessment considered in the LESA analysis. The soil resources for the Project site are illustrated on Figure 1.

The Palo Verde Valley is served by the Palo Verde Irrigation District (PVID). The PVID occupies about 189 square miles of service area in Riverside and Imperial counties, California. The PVID contains approximately 131,298 acres, 26,798 acres of which are on the Palo Verde Mesa. The Mesa lies just west of the Palo Verde Valley. The Colorado River forms the eastern and southern boundaries of the PVID (PVID, 2011). The majority of cultivated areas on the Mesa are irrigated with water from the Colorado River aquifer, supplied from the PVID or from domestic wells. Colorado River water is supplied through PVID canals and laterals, and lifted onto the Mesa by private pumps to irrigate a portion of the farmland in the PVID. There are also irrigation ditches that are owned and operated by water users in the PVID. The remaining Palo Verde Mesa irrigated acreage is irrigated from deep wells developed by the landowners.

Situated approximately five miles west of the City of Blythe, California, and directly east of the Blythe Airport, the Project site is composed of 1,707 acres of Farmland, as designated by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP). Of this total, 1,681 acres are Prime Farmland, 16 acres are Unique Farmland, and 10 acres are Farmland of Statewide Importance. The remainder of the 3,613-acre Project site are designated Farmland of Local Importance by Riverside County; however, none of this farmland is currently cultivated. The primary crop on the Palo Verde Mesa is citrus (PVID, 2011). Primary agricultural uses near the City of Blythe include alfalfa, cotton, hay, orchards, and field crops. The public land managed by the BLM through which the transmission line traverses to the Colorado River Substation (CRS) and a portion of the Project site, is designated in the California Desert Conservation Area Plan as Utility Corridor J and K and Department of Energy Section 368 Corridor 30-52, which overlap (see inset on Figure 2).

The Project site is zoned Light Agriculture with ten-acre minimum development (A-1-10) and Controlled Development with five- and ten-acre minimum development (W-2-5 and W-2-10) according to Riverside County Ordinance 348. The A-1 Zone and W-2 Zone permit the growing of field crops, vegetable gardening, tree crops, greenhouses, orchards, aviaries, and apiaries on a commercial scale; noncommercial keeping of horses and pigs; and grazing of cattle, horses, sheep, goats or other farm stock or animals for noncommercial purposes. The Blythe Municipal Airport directly west of the northernmost portion of the Project site is zoned Manufacturing-Heavy (M-H). Agriculture is not a permitted use in the M-H Zone. A portion of the Project site is zoned as Agriculture (A) by the City of Blythe.

The Riverside County land use designations for the Project site are Agriculture, City, and Rural Community-Estate Density Residential. The Riverside County General Plan Open Space and Land Use elements include agricultural policies for lands throughout the County. The majority of the planning area within the Palo Verde Valley is also regulated by the Palo Verde Valley Area Plan (PVVAP). The PVVAP provides policies related to agricultural lands.

SECTION 3 LESA EVALUATION

The following sections evaluate the quality and availability of agricultural resources for the Project site. The two Land Evaluation and four Site Assessment factors were measured to identify whether the Project would meet the threshold criteria as a significant impact to Agricultural Resources under CEQA Guidelines.

3.1 LAND EVALUATION

The Land Evaluation portion of the LESA Model focuses on two main components that are separately rated:

1. The Land Capability Classification (LCC) Rating: The LCC indicates the suitability of soils for most kinds of crops. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receiving the highest rating (Class I). Specific subclasses are also utilized to further characterize soils.

2. The Storie Index Rating: The Storie Index provides a numeric rating (based upon a 100 point scale) of the relative degree of suitability or value of a given soil for intensive agriculture. The rating is based upon soil characteristics only.

The United State Department of Agriculture (USDA) survey identified 15 soil types on the Project site. These include: Aco gravelly loamy sand; Aco sandy loam; badland; Carrizo gravelly sand; Cibola silty clay loam; duneland; Imperial silty clay; Meloland fine sandy loam; Orita fine sand; Orita gravelly fine sandy loam; Ripley very fine sandy loam; Rositas fine sand 0 to 2 percent slopes and 2 to 9 percent slopes; Rositas fine sand, wet, 0 to 2 percent slopes; and Rositas gravelly loamy sand, 0 to 2 percent slopes. Figure 1 depicts the distribution of soil types on the Project site. Table 2 details the varieties of soils found on the Project site, with their Land Capability Class and Storie Index Rating.

Table 2
Soil Suitability – Map Symbol Mapping Unit Capability

Map Symbol	Mapping Unit	Land Capability Class		California Revised Storie Index	
		Non-Irrigated	Irrigated	Revised Storie Index Grade	Storie Index Rating
Ac	Aco gravelly loamy sand	7e	2s	3 – Fair	42
Af	Aco sandy loam	7e	2s	1 – Excellent	84
BaG	Badland	8e	--	Not rated	Not rated
Ce	Carrizo gravelly sand	8s	4s	4 – Poor	20
Cs	Cibola silty clay loam	7s	2s	3 - Fair	49
DuD	Duneland	8e	--	Not rated	Not rated
Ic	Imperial silty clay	7s	3s	4 – Poor	26

Table 2
Soil Suitability – Map Symbol Mapping Unit Capability

Map Symbol	Mapping Unit	Land Capability Class		California Revised Storie Index	
		Non-Irrigated	Irrigated	Revised Storie Index Grade	Storie Index Rating
Md	Meloland fine sandy loam	7s	3w	5 – Very poor	15
Oc	Orita fine sand	7s	2s	3 – Fair	51
Or	Orita gravelly fine sandy loam	7s	2s	Not Rated	Not rated
Rb	Ripley very fine sandy loam	7s	2s	1 – Excellent	82
RoA	Rositas fine sand, 0 to 2 percent slopes	7s	3s	2 – Good	68
RoB	Rositas fine sand, 2 to 9 percent slopes	7s	3s	3 – Fair	46
RrA	Rositas fine sand, wet, 0 to 2 percent slopes	7s	3w	5 – Very poor	16
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes	7s	4s	4 – Poor	35

Source: California Department of Conservation, 1997; NRCS, 2012.

Notes:

2s capability rating indicates soils with moderate limitations that reduce the choice of plants or require moderate conservation practices.

The soils also have limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

3w capability rating indicates that soils have severe limitations that reduce the choice of plants or require special conservation practices. Excess water is the dominant hazard or limitation affecting the use of the soil. Poor soil drainage, wetness, a high water table, and overflow are the factors that affect soils in this subclass.

3s capability rating indicates that soils have severe limitations that reduce the choice of plants or require special conservation practices. The soils also have limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

4s capability rating indicates that soils have very severe limitations that restrict the choice of plants or require very careful management, or both. Additionally, soils have limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

7e capability rating indicates soils that have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife. Soil susceptibility to erosion is the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.

7s capability rating indicates soils that have very severe limitations that make them unsuited to cultivation and that restrict their use mainly to grazing, forestland, or wildlife. *S*oils also have limitations within the rooting zone, such as shallowness of the rooting zone, stones, low moisture-holding capacity, low fertility that is difficult to correct, and salinity or sodium content.

8e capability rating indicates soils and miscellaneous areas that have limitations precluding their use for commercial plant production and limiting their use to recreation, wildlife, or water supply or for esthetic purposes. The soils also display susceptibility to erosion as the dominant problem or hazard affecting their use. Erosion susceptibility and past erosion damage are the major soil factors that affect soils in this subclass.

Table 3
Land Capability Classification (LCC) and Storie Index Score

A	B	C	D	E	F	G	H
Map Symbol - Soil	Acres*	Portion of the Project Area***	LCC	LCC Rating	LCC Score	Storie Index	Storie Score
Ac – Aco gravelly loamy sand	258.64	7.16%	7e	10	0.72	42	3.01
Af – Aco sandy loam (Irrigated)	937.28	25.93%	2s	80	20.74	84	21.78
Af – Aco sandy loam (Non-Irrigated)	449.40	12.43%	7e	10	1.25	84	10.44
BaG – Badland	22.90	0.63%	8e	0	0	Not rated	--
Ce – Carrizo gravelly sand	2.20	0.06%	8s	0	0	20	0.01
Cs – Cibola silty clay loam	0.01	0%***	7s	10	0	49	0.00
DuD – Duneland	19.88	0.55%	8e	0	0	Not rated	--
Ic – Imperial silty clay	0.23	0.01%	3s	60	0.01	26	0.00
Md – Meloland fine sandy loam	0**	0%***	3w	60	0	15	0.00
Oc – Orita fine sand	46.74	1.29%	7s	10	0.13	51	0.66
Or – Orita gravelly fine sandy loam (Irrigated)	12.87	0.36%	2s	80	0.29	Not rated	--
Or – Orita gravelly fine sandy loam (Non-Irrigated)	21.11	0.58%	7s	10	0.06	Not rated	--
Rb – Ripley very fine sandy loam	0.64	0.02%	2s	80	0.02	82	0.01
RoA – Rositas fine sand, 0 to 2 percent slopes (Irrigated)	695.01	19.23%	3s	60	11.54	68	13.08
RoA – Rositas fine sand, 0 to 2 percent slopes (Non-Irrigated)	475.48	13.16%	7s	10	1.32	68	8.95
RoB – Rositas fine sand, 2 to 9 percent slopes (Irrigated)	333.55	9.23%	3s	60	5.54	46	4.25
RoB – Rositas fine sand, 2 to 9 percent slopes (Non-Irrigated)	215.43	5.96%	7s	10	0.60	46	2.74
RrA – Rositas fine sand, wet, 0 to 2 percent slopes	0.54	0.01%	3w	60	0.01	16	0.00
RsA – Rositas gravelly loamy sand, 0 to 2 percent slopes (Irrigated)	38.00	1.05%	4s	40	0.42	35	0.37
RsA – Rositas gravelly loamy sand, 0 to 2 percent slopes (Non-Irrigated)	84.51	2.34%	7s	10	0.23	35	0.82
TOTALS	3,614.42*	100%	--	--	42.86	--	66.12

Source: California Department of Conservation, 1997; NRCS, 2012.

*Acreages are rounded and approximate. Due to rounding, approximate acreages appear higher than approximation of 3,613 total Project site acres.

**Soil type was included because there are less than 0.01 acres on the Project site. When rounded, this totals 0.

***When rounded, percentage equals 0.

3.2 SITE ASSESSMENT FACTORS

The California LESA Model includes four Site Assessment factors that are separately rated:

1. The Project Size Rating
2. The Water Resources Availability Rating
3. The Surrounding Agricultural Land Rating
4. The Surrounding Protected Resource Land Rating

Project Size Rating

The Project Size Rating relies upon acreage figures tabulated under the Land Capability Classification Rating in Table 3. The Project Size Rating is based upon identifying acreage figures for three separate groupings of soil classes within the Project site, and then determining which grouping generates the highest Project Size score (California DOC, 1997).

To measure agricultural productivity, the size of a farming operation can be considered not just from its total acreage, but the acreage of different quality lands that comprise the operation. Lands with higher quality soils lend themselves to greater management and cropping flexibility and have the potential to provide a greater economic return per acre unit. Instead of relying on a single acreage figure, the Project is divided into three acreage groupings based on the Land Capability Classification ratings presented in Table 3. Relatively fewer acres of high quality soils are required to achieve a maximum Project Size score. Alternatively, a maximum score on lesser quality soils could be derived, provided there is a sufficiently large acreage present. This approach accounts for the significance of high quality agricultural land as well as lesser quality agricultural lands of large area.

The Project Size score is allocated 100 points for the respective grouping when: the total acres of Class I and Class II type soils is 80 acres or more; the total acres of Class III soils is 160 acres or more; or the total acres of Class IV and lower is 320 acres or more. As shown in Table 4, the Project site receives the maximum acres in each grouping; therefore, the final score for the Project Size is 100 points.

Table 4
Project Size Score

Map Symbol - Soil	Acres*	LCC	LCC Class I or II	LCC Class III	LCC Class IV-VIII
Ac – Aco gravelly loamy sand	258.64	7e			258.64
Af – Aco sandy loam (Irrigated)	937.28	2s	937.28		
Af – Aco sandy loam (Non-Irrigated)	449.40	7e			449.40
BaG – Badland	22.90	8e			22.90
Ce – Carrizo gravelly sand	2.20	8s			2.2

Table 4
Project Size Score

Map Symbol - Soil	Acres*	LCC	LCC Class I or II	LCC Class III	LCC Class IV-VIII
Cs – Cibola silty clay loam	0.01	7s			0.01
sDuD – Duneland	19.88	8e			19.88
Ic – Imperial silty clay	0.23	3s		0.23	
Md – Meloland fine sandy loam	0**	3w		0.0	
Oc – Orita fine sand	46.74	7s			46.74
Or – Orita gravelly fine sandy loam (Irrigated)	12.87	2s	12.87		
Or – Orita gravelly fine sandy loam (Non-Irrigated)	21.11	7s			21.11
Rb – Ripley very fine sandy loam	0.64	2s	0.64		
RoA – Rositas fine sand, 0 to 2 percent slopes (Irrigated)	695.01	3s		695.01	
RoA – Rositas fine sand, 0 to 2 percent slopes (Non-Irrigated)	475.48	7s			475.48
RoB – Rositas fine sand, 2 to 9 percent slopes (Irrigated)	333.55	3s		333.55	
RoB – Rositas fine sand, 2 to 9 percent slopes (Non-Irrigated)	215.43	7s			215.43
RrA – Rositas fine sand, wet, 0 to 2 percent slopes	0.54	3w		0.54	
RsA – Rositas gravelly loamy sand, 0 to 2 percent slopes (Irrigated)	38.00	4s			38.00
RsA – Rositas gravelly loamy sand, 0 to 2 percent slopes (Non-Irrigated)	84.51	7s			84.51
TOTAL ACRES	3,614.42*		950.79	1029.33	1634.30
PROJECT SIZE SCORES			100	100	100
HIGHEST SCORE			100		

Source: California Department of Conservation, 1997.

*Acreages are rounded and approximate. Due to rounding, approximate acreages appear higher than approximation of 3,613 total Project site acres.

**Soil type was included because there are less than 0.01 acres on the Project site. When rounded, this totals 0.

Water Resources Availability Rating

The Water Resources Availability Rating is based upon identifying the various water sources that may supply a given property, and then determining whether different restrictions in supply are likely to take place in years that are characterized as being periods of drought and non-drought (California DOC, 1997). The Project site, located on Palo Verde Mesa, is underlain by the Palo Verde Mesa Groundwater Basin (PVMGB).

The majority of the Project site is either served by Palo Verde Irrigation District surface infrastructure or domestic groundwater wells, contains either active or fallow farmland, and is located in desert climate

conditions. As a result, these areas (approximately 2,971.5 acres, or 82.2 percent of the Project site) received a Water Resource Availability Rating of 90, based on the availability of water delivery potentially provided to these areas. The remainder of the Project site, which consists of the southwestern-most portion of the site (approximately 641.9 acres, or 17.8 percent of the Project site) has not been developed and is not currently served by water supply facilities.

Development of water supply facilities within the southwestern-most portion of the Project site would be expected to encounter physical and economic restrictions due to the complex Colorado River system apportionment/entitlement and priority system affecting the PVID service area, and lack of current water supply infrastructure. Use of groundwater may also be subject to the proposed Lower Colorado River Accounting System (LCRAS) and the Accounting Surface, administered by the United States Bureau of Reclamation (USBR). The Accounting Surface extends to the margins of the Colorado River Aquifer which currently includes the PVMGB. Wells that have static water-levels equal to or below the Accounting Surface are presumed to yield water that will be replaced by water from the Colorado River, and therefore are subject to accounting and require an entitlement to use or divert river water. Pumping of additional water for agricultural use could result in water level drawdowns, such that the elevation of the water table could be below the Accounting Surface. For these reasons, the southwestern-most portion of the Project site received the lowest Water Resource Availability rating.

Table 5 illustrates the two portions and water sources to determine a water availability score for the Project.

Table 5
Water Resource Availability

Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score
1	Irrigation District and/or domestic wells	82.2%	90	74.0
2	Not irrigated at all	17.8%	0	0
Totals		100.0		74.0

Source: California Department of Conservation, 1997.

Surrounding Agricultural Land Rating

The Surrounding Agricultural Land Rating is designed to provide a measurement of the level of agricultural land use for lands near the Project site. Determination of the surrounding agricultural land use rating is based upon the identification of a "Zone of Influence" (ZOI), which is defined as that land near a given project, both directly adjoining and within a defined distance away, that is likely to influence, and be influenced by, the agricultural land use of the Project site. The ZOI is the amount of surrounding lands up to a minimum of one-quarter mile from the Project site boundary. Parcels that are intersected by the quarter-mile buffer are included in their entirety (see Figure 2 Surrounding Land). The LESA Model rates the potential significance of the conversion of an agricultural parcel that has a large proportion of

surrounding land in agricultural production more highly than one that has a relatively small percentage of surrounding land in agricultural production (California DOC, 1997).

Lands used for agricultural production within 0.25 mile of the site are located in the Palo Verde Valley to the east and south of the Project site. Because the percentage of agricultural land is less than 40 percent of the ZOI, the Surrounding Agricultural Land Rating score is zero, and is provided in Table 6.

Table 6
Surrounding Agricultural and Protected Lands

Total Acres within "Zone of Influence"*	Acres in Agricultural Production*	Acres of Protected Resource Land	Percent in Agriculture	Percent Protected Resources Land	Surrounding Agricultural Land Score	Surrounding Protected Resource Land Score
7,377	1,951.3	282.2	26.45%	3.82%	0	0

Source: California Department of Conservation, 1997.

*Zone of Influence is the amount of surrounding lands up to a maximum of one-quarter mile from the Project site boundary. Parcels that are intersected by the quarter-mile buffer are included in their entirety. Acreage calculations reflect the entire parcel intersected by the quarter-mile buffer and within the quarter-mile buffer itself.

Surrounding Protected Resource Land Rating

The Surrounding Protected Resource Land Rating is essentially an extension of the Surrounding Agricultural Land Rating, and is scored in a similar manner. The ZOI is the amount of surrounding lands up to a minimum of one-quarter mile from the Project site boundary. Parcels that are intersected by the quarter-mile buffer are included in their entirety (see Figure 2 Surrounding Land).

Protected resource lands are those lands with long term use restrictions that are compatible with or supportive of agricultural uses of land (California DOC, 1997). Included are the following:

- Williamson Act contracted lands;
- Publicly owned land maintained as park, forest, or watershed resources; and
- Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

The Project will not be located within an agriculture preserve, nor on land under a Williamson Act contract. However, the ZOI quarter-mile buffer, and all parcels intersected by the quarter-mile buffer, intersects 282.2 acres of lands under Williamson Act contract. Because the percentage of protected lands is less than 40 percent of the ZOI, the Surrounding Protected Resource Land Rating is zero.

SECTION 4 SUMMARY

The California LESA Model is weighted such that 50 percent of the total LESA score of a project is derived from the Land Evaluation (LE) factors, and 50 percent from the Site Assessment (SA) factors. Individual factor weights are listed below in Table 7, with the sum of the factored weights required to equal 100 percent.

Table 7
Final LESA Score Sheet Summary

	Factor Rating (0 – 100 Points)	Factor Weighting (Total = 100 Points)	Weighted Factor Rating
Land Evaluation			
1. Land Capability Classification (25%)	42.88	0.25	10.7
2. Storie Index Rating (25%)	66.12	0.25	16.5
		Land Evaluation Subscore	27.2
Site Assessment			
1. Project Size Rating (15%)	100	0.15	15
2. Water Resource Availability Rating (15%)	74.0	0.15	11.1
3. Surrounding Agricultural Land Rating (15%)	0	0.15	0
4. Surrounding Protected Resource Lands Rating (5%)	0	0.05	0
		Site Assessment Subscore	26.1
		TOTAL	53.3

Source: California Department of Conservation, 1997, pages 29-31.

As showing in Table 7, the LE subscore is 27.2, and the SA subscore is 26.1. As shown in Table 1, a final LESA score between 40 to 59 points is considered significant only if the LE and SA subscores are greater than or equal to 20 points. Therefore, with both subscores greater than 20, the Project is considered to have significant impact on agricultural resources.

SECTION 5 REFERENCES

California Department of Conservation, 1997. California Agricultural Land Evaluation and Site Assessment Model, *Instruction Manual*. Prepared by the California Department of Conservation, Office of Land Conservation, 1997.

Palo Verde Irrigation District (PVID), 2011 http://www.pvid.org. Accessed on September 3, 2012.

United States Department of Agriculture, 1981. *Soil Survey of Riverside County California, Palo Verde area*. Prepared by the United States Department of Agriculture Soil Conservation Service in cooperation with the University of California.

Blythe Mesa Solar Site
Zone of Influence 1/4 Mile Buffer
Parcel Boundary

Soils Classification

- Ac-Aco gravelly loamy sand
- Af-Aco sandy loam
- BaG-Badland
- Ce-Carrizo gravelly sand
- Co-Cibola fine sandy loam
- Cs-Cibola silty clay loam
- DuD-Duneland
- Gb-Gilman fine sandy loam
- Gc-Gilman silty clay loam
- Ge-Glenbar silty clay loam
- Hb-Holtville fine sandy loam
- Hc-Holtville silty clay
- Ib-Imperial fine sandy loam
- Ic-Imperial silty clay
- Ie-Indio silty clay loam
- Md-Meloland fine sandy loam
- Me-Meloland silty clay laom
- Oc-Orita fine sand
- Og-Orita gravelly loamy sand
- Or-Orita gravelly fine sandy loam
- Rb-Ripley very fine sandy loam
- Rc-Ripley silty clay loam
- RoA-Rositas fine sand, 0 to 2 percent slopes
- RoB-Rositas fine sand, 2 to 9 percent slopes
- RrA-Rositas fine sand, wet, 0 to 2 percent slopes
- RsA-Rositas gravelly loamy sand, 0 to 2 percent slopes
- RtA-Rositas silty clay loam, 0 to 2 percent slopes

* Note: The ZOI is the amount of surrounding lands up to a maximum of one-quarter mile from the Project site boundary. Parcels that are intersected by the quarter-mile buffer are included in their entirety.

Blythe Airport

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OVERVIEW MAP



SOURCES:
Parcels (Riverside County, 2010).
Project Site (Renewable Resources Group, 2012).
Aerial Imagery (NAIP, 5-25-2010).
Soils (NRCS, 2012).

SOILS MAP
BLYTHE MESA SOLAR SITE

URS

1500 0 1500 3000 Feet
SCALE: 1" = 3,000' (1:36,000)
SCALE CORRECT WHEN PRINTED AT 11X17

CREATED BY: CM	DATE: 9/10/2012	FIG. NO: 1
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Blythe Mesa Solar Site
Proposed Transmission Line
Zone of Influence 1/4 Mile Buffer
Parcel Boundary

Existing Substations
161 kV
230 kV
500 kV

Existing Transmission Lines
161 kV
220 kV
500 kV

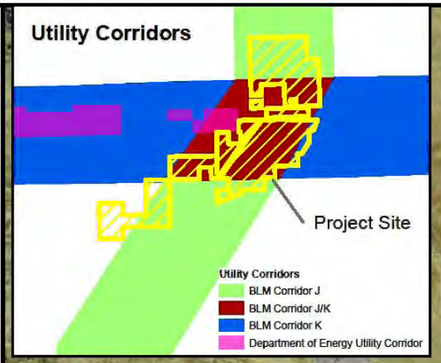
Land Ownership
US Bureau of Land Management
Unclassified

Farmland of Importance
Statewide
Prime
Unique
Local

Protected Resources Lands
California Williamson Act Lands (282.2 ac.)

* Note: The ZOI is the amount of surrounding lands up to a maximum of one-quarter mile from the Project site boundary. Parcels that are intersected by the quarter-mile buffer are included in their entirety.

Utility Corridors



McCoy Mountains

Blythe Airport

10

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Mule Mountains ACEC

SOURCES:
Project Site (Renewable Resource Group, 2012).
Aerial Imagery (NAIP, 2010).
Land Ownership (BLM, 3-03-2011).
Existing Transmission Lines, Existing Substations (Platts, 2009).
Utility Corridors (BLM, 10-7-2011).

URS

1750 0 1750 3500 Feet
SCALE: 1" = 3,500' (1:42,000)
SCALE CORRECT WHEN PRINTED AT 11X17

SURROUNDING LAND
BLYTHE MESA SOLAR SITE

CREATED BY: CM	DATE: 9/10/2012	FIG. NO: 2
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APPENDIX M
FISH AND WILDLIFE SERVICE
INFORMAL CONSULTATION MEMO

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262

In Reply Refer To:
FWS-ERIV-12B0299-12I0497

NOV 14 2012

Memorandum

To: Field Manager, Palm Springs Field Office, Bureau of Land Management
Palm Springs, California

From: Assistant Field Supervisor, Palm Springs Fish and Wildlife Office
Palm Springs, California

Subject: Informal Consultation for Renewables Resource Group Blythe Mesa I Solar Project, Riverside County, California

This memorandum responds to your July 16, 2012, memorandum, received by our office July 18, 2012, requesting our concurrence pursuant to section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*) that the proposed 485-megawatt Blythe Mesa I Solar Project is not likely to adversely affect the federally threatened Mojave desert tortoise (*Gopherus agassizii*). The Bureau of Land Management (BLM) proposes to issue a right-of-way (ROW) grant to Renewable Resources Group to construct, operate, and maintain a 230-kilovolt transmission line from the proposed project site to the Colorado River Substation.

The transmission line ROW covers approximately 73 acres of BLM-administered land. The solar generation facility would be on approximately 3,587 acres of private land west of Blythe, California, in unincorporated Riverside County, California. The project area is bisected by Interstate 10, and includes several disjunct parcels. Approximately 70 percent of the project area is actively cultivated agricultural land, 24 percent is previously disturbed by agricultural or military activities, and 6 percent undisturbed desert land.

The majority of the project site is disturbed land and marginal desert tortoise habitat. The approximately 220 acres of undisturbed land is too sandy to support desert tortoise burrows, and supports vegetation too sparse to be good foraging habitat for desert tortoises. Numerous desert tortoise surveys have been conducted within the previous 2 years along and near the proposed transmission route, in association with other projects proposed in the vicinity. No desert tortoises or tortoise sign were detected.

Based on coordination between our respective staffs, the following conservation measures would be implemented as part of the proposed project:

1. **Qualified Biologist**: In the following measures, a "qualified biologist" is defined as a person with appropriate education, training, and experience to conduct tortoise surveys, monitor project activities, provide worker education programs, and supervise or perform other implementing actions. The person must demonstrate an acceptable knowledge of tortoise biology, desert tortoise impact minimization techniques, habitat requirements, sign identification techniques, and survey procedures. Evidence of such knowledge may include work as a compliance monitor on a project in desert tortoise habitat, work on desert tortoise trend plot or transect surveys, conducting surveys for desert tortoise, or other research or field work on desert tortoise. Attendance at a training course endorsed by the agencies (e.g., Desert Tortoise Council tortoise training workshop) is a supporting qualification.

   A qualified biologist will be on-site during all construction. The qualified biologist shall conduct a pre-construction clearance survey of the project area, watch for tortoises wandering into the construction areas, check under vehicles, and examine excavations and other potential pitfalls for entrapped animals. The qualified biologist will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with the Field Contact Representative (FCR) (described below). The qualified biologist shall have the authority to halt all project activities that are in violation of these measures or that may result in the take of a tortoise. The qualified biologist shall have a copy of this letter when work is being conducted on the site. The qualified biologist is not authorized to handle or relocate desert tortoises as part of this project.

2. **Preconstruction Clearance Survey**: The qualified biologist shall conduct a pre-construction clearance survey of the project area. Transects for clearance surveys will be spaced 15 feet apart. Clearance will be considered complete after two successive surveys have been conducted without finding any desert tortoises. Clearance surveys must be conducted during the active season for desert tortoises (April through May or September through October). The qualified biologist is not authorized to handle or relocate desert tortoises as part of this project. If a tortoise or tortoise burrow is located during clearance surveys, the U.S. Fish and Wildlife Service (Service) will be contacted for direction on how to proceed.

3. **Field Contact Representative**: The project proponent will designate a FCR who will be responsible for overseeing compliance with desert tortoise protective measures and for coordination with the Service. The FCR will have the authority to halt all project activities that are not in compliance with the measures in this letter. The FCR will have a copy of this letter when work is being conducted on the site. The FCR may be an agent for the company, the site manager, any other project employee, a biological monitor, or other contracted biologist. Any incident occurring during the project activities that is considered by the qualified biologist to be in non-compliance with these measures will be documented immediately by the qualified biologist. The FCR will ensure that appropriate corrective action is taken. Corrective actions will be documented by the qualified

biologist. The following incidents will require immediate cessation of the project activities causing the incident: (1) location of a desert tortoise within the exclusion fencing; (2) imminent threat of injury or death to a desert tortoise; (3) unauthorized handling of a desert tortoise, regardless of intent; (4) operation of construction equipment or vehicles outside a project area cleared of desert tortoise, except on designated roads; and (5) conducting any construction activity without a biological monitor where one is required.

4. **Worker Training**: Prior to the onset of construction activities, a desert tortoise education program will be presented by the FCR or qualified biologist to all personnel who will be present on work areas within the project area. Following the onset of construction, any new employee will be required to formally complete the tortoise education program prior to working on site. At a minimum, the tortoise education program will cover the following topics:

    a) A detailed description of the desert tortoise, including color photographs;

    b) The distribution and general behavior of the desert tortoise;

    c) Sensitivity of the species to human activities;

    d) The protection the desert tortoise receives under the Act, including prohibitions and penalties incurred for violation of the Act;

    e) The protective measures being implemented to conserve the desert tortoise during construction activities; and

    f) Procedures and a point of contact if a desert tortoise is observed on site.

5. **Site Fencing**: Desert tortoise exclusion fencing will be installed around the project area. The fence will adhere to Service design guidelines, available at: http://www.fws.gov/ventura/species_information/protocols_guidelines/docs/dt/DT_Exclusion-Fence_2005.pdf. The qualified biologist will conduct a clearance survey before the tortoise fence is enclosed to ensure no tortoises are on the project site. If a tortoise is found, all construction activity will halt and the Service contacted for direction on how to proceed. Once installed, exclusion fencing will be inspected at least monthly and following all rain events, and corrective action taken if needed to maintain the integrity of the tortoise barrier.

    Fencing around the project site will include a desert tortoise exclusion gate. This gate will remain closed at all times, except when vehicles are entering or leaving the project site. If it is deemed necessary to leave the gate open for extended periods of time (e.g.,

during high traffic periods), the gate may be left open as long as a qualified biologist is present to monitor for tortoise activity in the vicinity.

Sites with potential hazards to desert tortoise (e.g., auger holes, steep-sided depressions) that are outside of the desert tortoise exclusion fencing will be fenced by installing exclusionary fencing, or not left unfilled overnight.

6. **Refuse Disposal**: All trash and food items shall be promptly contained within closed, raven-proof containers. These will be regularly removed from the project site to reduce the attractiveness of the area to common ravens and other desert predators. The FCR will be responsible for ensuring that trash is removed regularly from the site such that containers do not overflow, and that the trash containers are kept securely closed when not in use.

7. **Tortoises under vehicles**: Underneath vehicles parked outside of desert tortoise exclusion fencing will be inspected immediately prior to the vehicle being moved. If a tortoise is found beneath a vehicle, the vehicle will not be moved until the desert tortoise leaves of its own accord.

8. **Tortoises on roads**: If a tortoise is observed on or near the road accessing the project site, vehicular traffic will stop and the tortoise will be allowed to move off the road on its own.

9. **Tortoise Observations**: No handling of desert tortoise or burrow excavation is allowed as part of the proposed action. If a tortoise is observed outside of exclusion fencing, construction will stop and the tortoise allowed to move out of the area on its own. If a tortoise or tortoise burrow is observed within the exclusion fencing, all construction will stop, and the Service contacted for direction on how to proceed.

   The following activities are not authorized and will require immediate cessation of the construction activities causing the incident: (1) location of a desert tortoise within the exclusion fencing; (2) imminent threat of injury or death to a desert tortoise; (3) unauthorized handling of a desert tortoise, regardless of intent; (4) operation of construction equipment or vehicles outside a project area cleared of desert tortoise, except on designated roads; and (5) conducting any construction activity without a biological monitor where one is required.

10. **Dead or Injured Specimens**: Upon locating a dead or injured tortoise, the project proponent or agent is to immediately notify the Palm Springs Fish and Wildlife Office by telephone within 3 days of the finding. Written notification must be made within 5 days of the finding, both to the appropriate Service field office and to the Service's Division of Law Enforcement. The information provided must include the date and time of the

finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death, if known, and other pertinent information.

Based on the information provided and the agreed upon avoidance and minimization measures listed above, we concur that the proposed project is not likely to incidentally take or otherwise adversely affect desert tortoise. Should project plans change, if a listed species is detected on-site, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered and formal consultation or conference may be required.

Although this letter satisfies BLM's requirements under Section 7(a)(2) of the Act with regards to desert tortoise, this project raises several other resource concerns that should be adequately addressed in any National Environmental Policy Act (NEPA) documents. For example, the southwestern parcel of the proposed project is in the sand transport corridor that stretches from north of Palen Solar Energy Project to the edge of the agricultural fields by the Colorado River. This corridor is part of the preliminary plan-wide biological reserve system of the Desert Renewable Energy Conservation Plan. Therefore we recommend that the NEPA document include adequate avoidance measures and mitigation for sand transport corridors. As such, we recommend inclusion of an alternative in which the parcel in the sand transport corridor is removed from development.

If you have any questions regarding this consultation, please contact Fish and Wildlife Biologist Nisa Marks of this office at 760-322-2070, extension 208.

APPENDIX N
AIRPORT LAND USE COMMISSION DEVELOPMENT REVIEW

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AIRPORT LAND USE COMMISSION
RIVERSIDE COUNTY

CHAIR
Simon Housman
Rancho Mirage

VICE CHAIRMAN
Rod Ballance
Riverside

COMMISSIONERS

Arthur Butler
Riverside

John Lyon
Riverside

Glen Holmes
Hemet

Greg Pettis
Cathedral City

Richard Stewart
Moreno Valley

STAFF

Director
Ed Cooper

John Guerin
Russell Brady
Barbara Santos

County Administrative Center
4080 Lemon St., 14th Floor
Riverside, CA 92501
(951) 955-5132

www.rcaluc.org

April 25, 2012

Jay Olivas, Urban Regional Planner IV
Riverside County Planning Department
4080 Lemon Street, Twelfth Floor
Riverside CA, 92501
HAND DELIVERY

RE: AIRPORT LAND USE COMMISSION (ALUC) DEVELOPMENT REVIEW
File No.: ZAP1007BL11
Related File No.: CUP03670 (Conditional Use Permit)
APNs: See attached list.

Dear Mr. Olivas:

On April 12, 2012, the Riverside County Airport Land Use Commission (ALUC), by a 4-2 vote, found Conditional Use Permit No. 3670 (CUP03670) proposing to construct a 485 megawatt solar photovoltaic electric generating facility and associated facilities on 3,645 acres, including three electrical substations, two operations and maintenance buildings, inverters, transformers, 34.5 kV distribution lines, 230 kV transmission lines, and associated switchgear **CONSISTENT** with the 2004 Blythe Airport Land Use Compatibility Plan, subject to the following conditions:

CONDITIONS:

1. The following uses shall be prohibited:

   (a) Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

   (b) Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.

   (c) Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.

   (d) Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.

2. Any outdoor lighting installed shall be hooded and shielded to prevent either the spillage of lumens or reflection into the sky.

3. If the panels are mounted on a framework, said framework shall have a flat or matte finish so as to minimize reflection of sunlight.

4. Prior to issuance of building permits for any structures or panels on those parcels located wholly or partially within Airport Compatibility Zone B1, the landowner shall convey an avigation easement to the County of Riverside as owner of Blythe Airport.

5. The attached notice shall be provided to all potential purchasers, and shall be recorded as a deed notice for those parcels within the project located wholly or partially within Airport Compatibility Zones C and D.

6. All photovoltaic panels installed on the project shall have received an anti-reflective coating to minimize the potential for hazardous glare to occur to aircraft.

7. In the event that any incidence of glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "incidence" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, reprogramming the alignment of the panels at the time of day when incidences of glare occur to diminish or eliminate the source of the glint, glare, or flash. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

8. In the event that any incidence of electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an incidence, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "incidence" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. For each such incidence made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

9. The Federal Aviation Administration (FAA) has conducted aeronautical studies (Aeronautical Study Nos. 2012-AWP-551-OE, 2012-AWP-552-OE, 2012-AWP-562-OE, 2012-AWP-566-OE through 2012-AWP-571-OE, 2012-AWP-573-OE, 2012-AWP-1712-OE through 2012-AWP-1725-OE) and has determined that neither marking nor lighting of the proposed structures are necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, any such lighting shall be installed in accordance with FAA Advisory Circular 70/7460-1 K Change 2. Such lighting shall be maintained in accordance therewith for the life of the project.

10. The maximum height of the proposed structure, including all mounted appurtenances and aviation safety lighting (if any), shall not exceed the heights as noted in each

Determination of No Hazard to Air Navigation for each respective structure.

11. In accordance with the Determinations of No Hazard to Air Navigation issued for the subject structures, the determinations do include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated in each respective determination. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

12. The specific coordinates, height, top point elevation, power, and frequencies of the proposed facility shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission.

13. Within five (5) days after construction reaches its greatest height, the permittee shall complete Form 7460-2, Notice of Actual Construction or Alteration, and submit said form to the Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Service at 2601 Meacham Boulevard, Fort Worth, TX 76137 or online at www.oeaaa.faa.gov. This requirement is also applicable in the event the project is abandoned.

If you have any questions, please contact Russell Brady, ALUC Contract Planner, at (951) 955-0549 or John Guerin, ALUC Principal Planner, at (951) 955-0982.

Sincerely,
RIVERSIDE COUNTY AIRPORT LAND USE COMMISSION

Edward C. Cooper, Director

RB:bks

Attachments: Notice of Airport in Vicinity
FAA Aeronautical Study Nos. 2012-AWP-551-OE, 2012-AWP-552-OE, 2012-AWP-562-OE, 2012-AWP-566-OE through 2012-AWP-571-OE, 2012-AWP-573-OE, 2012-AWP-1712-OE through 2012-AWP-1725-OE

cc: Rupal Patel, Renewable Resources Group, Inc.
Thomas Ryan, POWER Engineers
Jason Pfaff, POWER Engineers
Scott Kaminski, SunPower Corp.
Philip Crimmins, CALTRANS Division of Aeronautics
Chad Davies, Riverside County EDA – Aviation Division
Robert Eppers, California Pilots Association
Andy Wilson, California Pilots Association
ALUC Staff

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